

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)  
**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:09  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**C Number:** MG96005  
**Lock Date:** Not Entered.  
**Cage Range:** All  
**Date Range:** All  
**Reasons For Removal:** All  
**Removal Date Range:** All  
**Treatment Groups:** All  
**Study Gender:** Both  
**PWG Approval Date** NONE

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 Lab: NCTR

CD Rat Male F1 0PPM	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	2	3	4	4	4	4	5	0	5	5	6	6	6	7	7	7	7	7	7	7
		2	7	6	3	3	7	8	6	5	7	7	9	6	8	9	1	2	3	3	3	3
		7	5	4	3	6	5	5	9	7	2	8	8	9	2	7	2	7	0	7	7	8
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	1	1	1	1	0	1	1	2	3	3	3	4	4	4	4	4	5	5
		4	5	6	0	0	1	2	7	7	8	9	1	2	5	8	0	3	5	6	7	6
		1	2	5	0	3	9	3	9	5	6	1	2	2	9	5	7	8	0	0	1	7
		2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2
		3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3

**Alimentary System**

Esophagus	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	A	A	M	A	A	A	+	+	A	+	A	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	A	A	+	A	A	A	+	+	A	+	A	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum																						
Intestine Small, Duodenum	+	+	A	A	+	A	A	A	+	+	A	+	A	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	A	A	+	A	A	A	+	+	A	+	A	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	A	A	+	A	A	A	+	+	A	+	A	+	+	+	+	+	+	+	+	+
Adenocarcinoma																						
Liver	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+
Hepatocellular Adenoma																						
Mesentery		+																				
Pancreas	+	+	A	A	+	A	+	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	A	A	+	A	+	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+
Neurofibrosarcoma																						
X																						
Stomach, Forestomach	+	+	A	A	+	A	A	A	+	+	A	+	A	+	+	+	+	+	+	+	+	+
Stomach, Glandular	+	+	A	A	+	A	A	A	+	+	A	+	A	+	+	+	+	+	+	+	+	+

**Cardiovascular System**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+

**Endocrine System**

\* ..Total animals with tissue examined microscopically; Total animals with tumor

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X ..Lesion present

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adrenal Cortex		+	+	A	A	+	+	+	+	+	A	+	A	+	+	+	A	+	+	+	+	+	+
Adenoma																							X
Adrenal Medulla		+	+	A	A	+	A	+	+	M	+	A	+	A	+	+	+	A	+	+	+	+	+
Bilateral, Pheochromocytoma Benign																							+
Pheochromocytoma Benign																							+
Pheochromocytoma Complex																							+
Islets, Pancreatic		+	+	+	A	+	A	+	+	+	A	+	A	+	+	+	A	A	+	+	+	+	+
Adenoma																							+
Parathyroid Gland		+	+	+	+	+	M	+	+	+	+	+	M	+	+	+	+	+	M	+	+	+	M
Adenoma																							+
Pituitary Gland		+	+	+	M	+	A	+	+	+	A	+	A	+	+	+	A	A	+	+	+	+	+
Pars Distalis, Adenoma																							X
Pars Distalis, Adenoma, Multiple																							X
Thyroid Gland		+	+	+	A	+	A	+	+	+	A	+	A	+	+	+	A	A	+	+	+	+	+
C Cell, Adenoma																							+
General Body System																							+
NONE																							+
Genital System																							+
Coagulating Gland		+	+	+	A	+	A	A	+	+	A	+	A	+	+	+	A	A	+	+	+	+	+
Adenocarcinoma, Metastatic, Prostate																							+
Ductus Deferens																							A
Epididymis		+	+	+	A	+	A	A	+	+	+	+	+	+	+	+	A	A	+	+	+	+	+
																							+

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	2	2	3	4	4	4	5	0	5	5	6	6	6	7	7	7	7	7	7	7	7	7	7	
	2	7	6	3	3	7	8	6	5	7	9	6	8	9	1	2	3	3	3	3	3	3	3	
Preputial Gland	7	5	4	3	6	5	5	9	7	2	8	8	9	2	7	2	7	0	7	7	8	8	9	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Squamous Cell Carcinoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	1	1	1	1	0	1	1	2	3	3	3	4	4	4	4	4	5	5	5	5	
Prostate	0	0	0	1	1	1	1	0	1	1	2	3	3	3	4	4	4	4	4	5	5	5	5	
	+	+	+	A	A	A	A	+	A	A	M	A	A	A	A	A	A	A	A	A	A	A	A	
Prostate, Dorsal Lobe	+	+	+	A	+	A	+	+	A	+	A	+	A	+	M	A	+	+	+	+	+	+	+	
	+	+	+	A	+	A	+	+	A	+	A	+	A	+	A	+	+	+	+	+	+	+	+	
Adenocarcinoma	4	5	6	0	0	1	2	7	7	8	9	1	2	5	8	0	3	5	6	7	7	1	1	
	1	2	5	0	3	9	3	9	5	6	1	2	2	9	5	7	8	0	1	7	8	5	6	
Prostate, Ventral Lobe	+	+	+	A	+	A	A	+	+	A	+	+	+	+	A	A	+	+	+	+	+	+	+	
	+	+	+	A	+	A	A	+	+	A	+	+	+	+	A	A	+	+	+	+	+	+	+	
Adenocarcinoma	+	+	+	A	+	A	A	+	+	A	+	+	+	+	A	A	+	+	+	+	+	+	+	
	+	+	+	A	+	A	A	+	+	A	+	A	+	A	+	A	+	+	+	+	+	+	+	
Rete Testes	+	+	+	+	+	M	A	M	+	M	+	+	+	+	M	+	+	I	I	+	+	+	+	
	+	+	A	A	+	A	A	+	+	A	+	A	+	A	+	A	+	+	+	+	+	+	+	
Seminal Vesicle	+	+	A	A	+	A	A	+	+	A	+	A	+	A	+	A	+	+	+	+	+	+	+	
	+	+	A	A	+	A	A	+	+	A	+	A	+	A	+	A	+	+	+	+	+	+	+	
Adenocarcinoma, Metastatic, Prostate	+	+	+	+	+	X																		
	+	+	+	+	+																			
Testes	+	+	+	+	+																			
	+	+	+	+	+																			
<b>Hematopoietic System</b>																								
Bone Marrow	+	+	A	A	+	A	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+	
	+	+	A	A	+	A	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node, Mandibular	+	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	
	+	+	A	A	+	+	+	+	+	A	+	A	+	A	+	A	+	+	+	+	+	+	+	
Lymph Node, Mesenteric	+	+	A	A	+	+	+	+	+	A	+	A	+	A	+	A	+	+	+	+	+	+	+	
	+	+	A	A	+	+	+	+	+	A	+	A	+	A	+	A	+	+	+	+	+	+	+	
Spleen	+	+	+	A	+	+	+	+	+	A	+	A	+	A	+	A	+	+	+	+	+	+	+	
	+	+	A	A	+	+	+	+	+	A	+	A	+	A	+	A	+	+	+	+	+	+	+	
Thymus	+	+	M	A	+	+	+	+	+	A	+	A	M	+	M	+	I	+	+	+	+	+	+	
	+	+	M	A	+	+	+	+	+	A	+	A	M	+	M	+	I	+	+	+	+	+	+	
<b>Integumentary System</b>																								
Mammary Gland	+	+	I	A	I	A	I	+	+	I	I	+	A	I	M	+	+	+	+	+	+	+	+	
	M	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Skin	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
								X																

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lipoma		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sarcoma		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Musculoskeletal System</b>		0	0	0	1	1	1	1	1	1	1	2	3	3	3	4	4	4	4	4	5	5	5
Bone, Femur		+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Nervous System</b>		+	+	+	A	+	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+
Brain, Brain Stem		+	+	+	A	+	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+
Brain, Cerebellum		+	+	+	A	+	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+
Granular Cell Tumor Malignant																							X
Brain, Cerebrum		+	+	+	A	+	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+
<b>Respiratory System</b>		+	+	+	A	+	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+
Lung		+	+	A	A	+	+	+	+	+	A	+	+	+	+	A	A	+	+	+	+	+	+
Alveolar/Bronchiolar Carcinoma																							
Nose		+	+	A	A	+	A	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+
Trachea		+	+	A	A	A	A	A	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+
<b>Special Senses System</b>		+	+	A	A	+	A	A	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+
Eye																							
Harderian Gland																							
Adenoma																							
Lacrimal Gland																							
<b>Urinary System</b>																							

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	2	2	3	4	4	4	5	0	5	5	6	6	6	7	7	7	7	7	7	7	7	7
	2	7	6	3	3	7	8	6	5	7	9	6	8	9	1	2	3	3	3	3	3	3
Kidney	7	5	4	3	6	5	5	9	7	2	8	8	9	2	7	2	7	0	7	7	8	8
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adenoma, Tubular	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	1	1	1	0	1	1	2	3	3	3	4	4	4	4	4	5	5	5
Urinary Bladder	4	5	6	0	0	1	2	7	7	8	9	1	2	5	8	0	3	5	6	7	1	7
	1	2	5	0	3	9	3	9	5	6	1	2	2	9	5	7	8	0	0	1	7	8
<b>SYSTEMIC LESIONS</b>																						
Multiple Organ	+	+	A	A	+	+	+	+	+	A	+	A	+	+	+	A	A	+	+	+	+	+
	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Leukemia Granulocytic																						X
Lymphoma Malignant																						X
Mesothelioma Benign																						X

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		9	9	2	2	3	3	3	3	4	4	4	4	4	5	5	5	8	9	9	9
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	8	7	8	9
		0	0	5	5	3	3	9	9	8	8	1	1	4	7	7	7	0	9	5	5
		4	5	6	7	8	9	3	9	3	4	3	4	2	5	8	9	3	6	4	5

\*TOTALS

**Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	53
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	37
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Adenocarcinoma															X						1
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	51
Hepatocellular Adenoma														X							1
Mesentery																					1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Neurofibrosarcoma																					1
Stomach, Forestomach	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45

**Cardiovascular System**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	53
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52

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CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:10  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 0PPM	DAY ON TEST																					*TOTALS
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Adenoma																						1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Bilateral, Pheochromocytoma Benign																						1
Pheochromocytoma Benign																						1
Pheochromocytoma Complex																						1
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Adenoma																						1
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	M	+	+	+	+	47
Adenoma															X							1
Pituitary Gland	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pars Distalis, Adenoma								X	X	X	X	X	X	X	X	X	X	X	X	X	X	22
Pars Distalis, Adenoma, Multiple																						1
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
C Cell, Adenoma															X							1
<b>General Body System</b>																						
NONE																						
<b>Genital System</b>																						
Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Adenocarcinoma, Metastatic, Prostate															X							1
Ductus Deferens																						0
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	51

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:10  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 0PPM	DAY ON TEST																					*TOTALS	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*TOTALS
Preputial Gland	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+		
Squamous Cell Carcinoma										X													
Prostate																							
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Adenocarcinoma	X																						
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Adenocarcinoma	X																						
Rete Testes	+	+	+	+	+	+	+	+	+	I	I	+	+	+	+	+	+	+	+	A	+		
Seminal Vesicle	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+		
Adenocarcinoma, Metastatic, Prostate	X																						
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
<b>Hematopoietic System</b>																							
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Lymph Node										X													
Lymph Node, Mandibular											+												
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Thymus	+	+	M	+	+	+	+	+	+	M	+	M	+	+	+	M	M	+	+	+	+		
<b>Integumentary System</b>																						41	
Mammary Gland	+	+	+	+	I	+	+	+	+	+	+	+	+	+	I	+	+	I	+	+	+		
Skin	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Fibroma																							

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I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:10  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

CD Rat Male F1 0PPM	DAY ON TEST																					<b>*TOTALS</b>	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>X</b>
Lipoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>Musculoskeletal System</b>	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	8	7	8	8	9		
Bone, Femur	0	0	5	5	3	3	9	9	8	8	1	1	4	7	7	7	0	9	5	5	0		
<b>Nervous System</b>	4	5	6	7	8	9	3	9	3	4	3	4	2	5	8	9	3	6	4	5	2		
Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Granular Cell Tumor Malignant																							
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
<b>Respiratory System</b>																							
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	<b>X</b>	
Alveolar/Bronchiolar Carcinoma																							
Nose	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
<b>Special Senses System</b>																						<b>X</b>	
Eye	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Adenoma																							
Lacrimal Gland																							
<b>Urinary System</b>																						<b>X</b>	
	+	+	+	+																			

\* ..Total animals with tissue examined microscopically; Total animals with tumor

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**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:10  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

CD Rat Male F1 0PPM	DAY ON TEST	0 0																				
		7 7																				
ANIMAL ID	3 3 4 5	9 9 2 2 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5																				
	0 0	0 0																				
*TOTALS																						
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Adenoma, Tubular																						1
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
<b>SYSTEMIC LESIONS</b>																						
Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	54	
Leukemia Granulocytic																						1
Lymphoma Malignant																						2
Mesothelioma Benign	4	5	6	7	8	9	3	9	9	8	8	1	1	4	7	7	7	0	9	5	0	3

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 Route: DOSED FEED  
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Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:11  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 5PPM	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	3	4	4	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
		9	0	2	5	2	0	1	3	8	3	3	3	3	3	3	3	3	3	3	4	4
		6	3	9	3	5	2	7	4	8	7	7	8	8	8	8	9	9	9	2	2	3
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	1	1	2	2	2	3	4	4	4	5	5	5	5	5	5	5	6	6
		5	5	9	1	3	1	3	7	6	6	6	6	0	0	4	6	6	6	8	8	7
		3	4	9	5	2	6	1	7	3	1	2	3	4	5	6	1	4	5	6	1	5

**Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	A	+	A	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	A	+	+	+	A	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																		X				
Intestine Large, Rectum																						
Intestine Small, Duodenum	A	+	A	+	A	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	A	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenocarcinoma																		X				
Intestine Small, Jejunum	+	+	A	+	A	A	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenocarcinoma																		X				
Liver	+	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hepatocellular Adenoma																		X				
Hepatocellular Carcinoma																		X				
Mesentery																						
Pancreas	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	A	+	+	+	A	+	+	A	A	+	+	+	+	+	+	+	+	+	M	+	+	+
Stomach, Glandular	A	+	+	+	A	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+

**Cardiovascular System**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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Experiment Number: 99930-92  
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 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:11  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 5PPM	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	3	4	4	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
		9	0	2	5	2	0	1	3	8	3	3	3	3	3	3	3	3	3	3	4	4
		6	3	9	3	5	2	7	4	8	7	7	8	8	8	8	9	9	9	2	2	3
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	1	1	2	2	2	3	4	4	4	5	5	5	5	5	5	5	6	6
		5	5	9	1	3	1	3	7	6	6	6	6	0	0	4	6	6	6	8	8	7
		3	4	9	5	2	6	1	7	3	1	2	3	4	5	6	1	4	5	6	1	5

**Endocrine System**

Adrenal Cortex	A	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																	X				
Adrenal Medulla	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pheochromocytoma Benign																					
Pheochromocytoma Malignant																					
Islets, Pancreatic	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																		X		X	
Parathyroid Gland	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+
Pituitary Gland	A	+	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	M	+
Pars Distalis, Adenoma																					
Thyroid Gland								X	X		X						X	X			X
C Cell, Adenoma																					
C Cell, Carcinoma																					

**General Body System**

NONE

**Genital System**

Coagulating Gland	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Epididymis	+	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Penis																					
Preputial Gland					A	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+

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CD Rat Male F1 5PPM	DAY ON TEST																						
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Squamous Cell Carcinoma																				X		X	
Prostate																							+
Prostate, Dorsal Lobe		+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	
Prostate, Ventral Lobe		+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	
Rete Testes		+	+	+	M	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Seminal Vesicle		A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	
Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hematopoietic System																							
Bone Marrow		+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node		+	+							+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node, Mandibular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Spleen		+	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	
Thymus		+	I	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	I	+	M	
Integumentary System																							
Mammary Gland		+	+	I	+	A	+	M	I	+	+	+	+	+	+	+	+	+	+	I	+	+	
Fibroadenoma																							
Skin		+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	
Basal Cell Adenoma																				X			
Fibroma																							
Keratoacanthoma																							
Sarcoma																							

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P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

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 Lab: NCTR

CD Rat Male F1 5PPM	DAY ON TEST																						
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2	3	4	4	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	
		9	0	2	5	2	0	1	3	8	3	3	3	3	3	3	3	3	3	3	3	3	
		6	3	9	3	5	2	7	4	8	7	7	8	8	8	8	9	9	9	2	2	3	
ANIMAL ID																							
0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0		0	0	0	1	1	2	2	2	3	4	4	4	5	5	5	5	5	5	5	5	6	
5		5	9	1	3	1	3	7	6	6	6	0	0	0	4	6	6	6	8	8	8	9	
3		4	9	5	2	6	1	7	3	1	2	3	4	5	6	1	4	5	6	1	5	6	
3		4	9	5	2	6	1	7	3	1	2	3	4	5	6	1	4	5	6	1	5	6	

Squamous Cell Papilloma

**Musculoskeletal System**

Bone, Femur

+

**Nervous System**

Brain, Brain Stem

A

Brain, Cerebellum

A

Brain, Cerebrum

A

Granular Cell Tumor Malignant

X

**Respiratory System**

Lung

A

Alveolar Epith, Adenoma

X

Nose

A

Trachea

A

**Special Senses System**

Eye

+

Harderian Gland

+

Lacrimal Gland

+

Zymbal's Gland

+

Squamous Cell Carcinoma

X

**Urinary System**

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**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:12  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

CD Rat Male F1 5PPM	DAY ON TEST	0 0																			
		2 3 4 4 5 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7																			
		9 0 2 5 2 0 1 3 8 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3																			
		6 3 9 3 5 2 7 4 8 7 7 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9																			
		0 0																			
		0 0																			
		0 0 0 1 1 2 2 2 3 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5																			
Kidney	A	+ +																			
Urinary Bladder		+ + + + A +																			
<b>SYSTEMIC LESIONS</b>																					
Multiple Organ		+ +																			
Lymphoma Malignant		X X X																			

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:12  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 5PPM**

DAY ON TEST	0 0																	
	7 7																	
	4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5 5 5 5																	
	3 3 4 4 4 4 4 5 5 5 9 9 9 9 0 0 0 2 2 2 3																	
	0 0																	
ANIMAL ID	0 0																	
	0 0																	
	6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7																	
	9 9 1 1 3 3 6 6 7 9 9 4 5 8 8 8 8 8 9 9 9																	
	5 8 2 5 0 1 5 6 7 2 3 6 1 0 1 2 6 7 6																	

\*TOTALS

#### Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Adenoma																			1
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Adenocarcinoma																			1
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Adenocarcinoma																			1
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Hepatocellular Adenoma																			2
Hepatocellular Carcinoma																			1
Mesentery																			1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
<b>Cardiovascular System</b>																			
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:12  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 5PPM	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5
		3	3	4	4	4	4	5	5	5	9	9	9	9	0	0	0	2	2
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		6	6	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	9
		9	9	1	1	3	3	6	6	7	9	9	4	5	8	8	8	9	9
		5	8	2	5	0	1	5	6	7	2	3	6	1	0	1	2	6	7
		6	7	8	9	9	10	11	12	13	14	15	16	17	18	19	20	21	22

\*TOTALS

#### Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Adenoma																			1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pheochromocytoma Benign																		X	1
Pheochromocytoma Malignant																			1
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Adenoma																		X	3
Parathyroid Gland	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Pars Distalis, Adenoma	X		X		X	X												X	14
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
C Cell, Adenoma																			2
C Cell, Carcinoma																			1

#### General Body System

NONE

#### Genital System

Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Penis																			1
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

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I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:12  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Male**  
**F1 5PPM**

DAY ON TEST	0 0																		
	7 7																		
	4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5 5 5 5																		
	3 3 4 4 4 4 4 5 5 5 9 9 9 9 0 0 0 2 2 3																		
	0 0																		
ANIMAL ID	0 0	0 0	6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	9 9 1 1 3 3 3 6 6 6 7 9 9 4 5 8 8 8 8 8 8	5 8 2 5 0 1 5 6 6 7 2 3 6 1 0 1 2 6 7 6 6	<b>*TOTALS</b>													
Squamous Cell Carcinoma																	X	3	
Prostate																			9
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Rete Testes	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
<b>Hematopoietic System</b>																			
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Lymph Node																			13
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Thymus	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	+	+	+	44
<b>Integumentary System</b>																			
Mammary Gland	+	+	+	+	+	+	I	+	+	I	+	+	+	+	+	+	+	+	43
Fibroadenoma															X				1
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Basal Cell Adenoma																			1
Fibroma																			1
Keratoacanthoma														X					1
Sarcoma																			1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:12  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 5PPM**

DAY ON TEST																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5
	3	3	4	4	4	4	5	5	5	9	9	9	9	0	0	2	2	3
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	6	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	9
	9	9	1	1	3	3	6	6	7	9	9	4	5	8	8	9	9	2
	5	8	2	5	0	1	5	6	7	2	3	6	1	0	1	2	6	7

\*TOTALS

1

Squamous Cell Papilloma

X

#### Musculoskeletal System

Bone, Femur

+

50

#### Nervous System

Brain, Brain Stem

+

48

Brain, Cerebellum

+

48

Brain, Cerebrum

+

48

Granular Cell Tumor Malignant

1

#### Respiratory System

Lung

+

47

Alveolar Epith, Adenoma

1

Nose

+

48

Trachea

+

47

#### Special Senses System

Eye

+

42

Harderian Gland

+

42

Lacrimal Gland

+

9

Zymbal's Gland

1

Squamous Cell Carcinoma

1

#### Urinary System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

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**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

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**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Male**  
**F1 5PPM**

DAY ON TEST																		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
<b>SYSTEMIC LESIONS</b>																		
Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymphoma Malignant																		3

**\*TOTALS**

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
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**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:12  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

CD Rat Male F1 100PPM	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	4	5	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		1	7	8	9	1	1	7	3	3	3	3	3	3	3	3	3	3	4	4	4	4
		3	4	9	3	7	9	0	5	5	7	8	8	8	8	8	8	9	3	3	4	4
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	1	2	2	2	2	3	4	4	4	5	5	5	5	5	5	6	6	6	6	7
		3	2	0	0	3	3	2	6	6	6	0	0	0	1	1	7	8	2	6	3	9
		9	0	1	4	0	2	8	4	5	6	7	8	9	0	1	2	1	4	0	2	9

**Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum																						
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hepatocellular Adenoma																						
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

**Cardiovascular System**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

**Endocrine System**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pheochromocytoma Benign																X						

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:13  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 100PPM**

DAY ON TEST	ANIMAL ID																			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	4	5	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
	1	7	8	9	1	1	7	3	3	3	3	3	3	3	3	3	3	4	4	4
	3	3	4	9	3	7	9	0	5	5	7	8	8	8	8	8	9	3	3	4
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																			X	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	M	+
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+
Pars Distalis, Adenoma		X	X	X	X	X	X												X	X
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				
C Cell, Adenoma																				
<b>General Body System</b>																				
Tissue NOS																+				
Chondrosarcoma																X				
<b>Genital System</b>																				
Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+
Squamous Cell Carcinoma																				
Prostate	+																+			
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Rete Testes	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	I	+	+	+	+
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

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Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:13  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 100PPM	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	4	5	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		1	7	8	9	1	1	7	3	3	3	3	3	3	3	3	3	3	4	4	4	4
		3	4	9	3	7	9	0	5	5	7	8	8	8	8	8	8	9	3	3	4	4
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	1	2	2	2	2	3	4	4	4	5	5	5	5	5	5	6	6	6	6	7
		3	2	0	0	3	3	2	6	6	6	0	0	0	1	1	7	8	2	6	2	3
		9	0	1	4	0	2	8	4	5	6	7	8	9	0	1	2	1	4	0	2	9

#### Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node	+	+			+	+	+	+	+													+
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Thymus	+	+	+	+	+	+	+	+	M	+	+	+	M	+	+	+	+	+	+	+	+	I

#### Integumentary System

Mammary Gland	I	+	I	I	+	I	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenocarcinoma																		X				
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Fibrosarcoma								X														
Sarcoma																	X					

#### Musculoskeletal System

Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

#### Nervous System

Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Granular Cell Tumor Benign

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:13  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 100PPM**

DAY ON TEST	ANIMAL ID																				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	4	5	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
1	7	8	9	1	1	7	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4
3	3	4	9	3	7	9	0	5	5	7	8	8	8	8	8	8	9	3	3	4	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	2	2	2	2	3	4	4	4	5	5	5	5	5	5	5	6	6	6	6	7
3	2	0	0	0	3	3	2	6	6	6	0	0	0	1	1	1	7	8	2	6	7
9	0	1	4	0	2	8	4	5	6	7	8	9	0	1	2	1	4	0	2	9	0
6	7	8	9	1	1	7	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4
7	8	9	0	1	2	2	3	4	4	5	5	5	5	5	5	6	6	6	6	7	7
8	9	0	1	2	2	3	4	4	5	5	5	5	5	5	5	6	6	6	6	7	7
9	0	1	2	2	3	4	5	6	7	8	9	0	1	2	1	2	1	4	0	2	9

### Respiratory System

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Chondrosarcoma, Metastatic, Uncertain Primary Site																	X							
Fibrosarcoma, Metastatic, Skin																			X					
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

### Special Senses System

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Harderian Gland																				X				
Lacrimal Gland																								

### Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fibrosarcoma, Metastatic, Skin																	X							
Urethra																								
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

### SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymphoma Malignant	X	X			X																			
Mesothelioma Malignant																		X						

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:13  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 100PPM	DAY ON TEST	0 0																																				
		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7																																				
		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5																																				
		5 7 7 7 8 8 8 9 9 9 9 9 9 9 9 9 0 0 0 0 2																																				
		0 0																																				
ANIMAL ID																																						
0 0																																						
0 0																																						
7 7 7 9 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 9																																						
7 6 6 0 9 9 5 8 4 4 4 4 4 8 8 8 8 2 7 7 2																																						
6 2 3 0 4 5 2 4 2 3 4 5 4 5 6 3 7 7 8 9																																						

\*TOTALS

#### Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hepatocellular Adenoma										X									2
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

#### Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

#### Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Pheochromocytoma Benign										X									2

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:14  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 100PPM**

DAY ON TEST	ANIMAL ID																		*TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5
5	7	7	7	7	8	8	8	9	9	9	9	9	9	9	9	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	7	7	9	7	7	8	7	8	8	8	8	8	8	8	8	8	8	8	9
7	6	6	0	9	9	5	8	4	4	4	4	4	8	8	8	2	7	7	2
6	2	3	0	4	5	2	4	2	3	4	5	4	5	6	3	7	8	9	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Adenoma																			1
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Pars Distalis, Adenoma		X	X	X				X	X	X	X	X							22
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
C Cell, Adenoma																			1
<b>General Body System</b>																			
Tissue NOS																			1
Chondrosarcoma																			1
<b>Genital System</b>																			
Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Squamous Cell Carcinoma			X																1
Prostate																			2
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Rete Testes	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:14  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Male**  
**F1 100PPM**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5
	5	7	7	7	8	8	8	9	9	9	9	9	9	9	0	0	0	2
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	9	7	7	8	7	8	8	8	8	8	8	8	8	8	9
	7	6	6	0	9	9	5	8	4	4	4	4	8	8	8	2	7	2
	6	2	3	0	4	5	2	4	2	3	4	5	4	5	6	3	7	8

\*TOTALS

#### Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymph Node	+	+	+	+	+	+	+	+	+									16
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	49
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Thymus	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	M	45

#### Integumentary System

Mammary Gland	+	+	+	+	+	+	+	I	+	+	I	+	+	I	+	+	+	40
Adenocarcinoma																		1
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Fibrosarcoma																		1
Sarcoma																		1

#### Musculoskeletal System

Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

#### Nervous System

Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Granular Cell Tumor Benign							X											1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
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### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:14  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 100PPM	DAY ON TEST	0 0																	
		7 7																	
ANIMAL ID	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5 5 5 5																		
	5 7 7 7 8 8 8 9 9 9 9 9 9 9 9 9 9 0 0 0 0 2																		
*TOTALS																			

#### Respiratory System

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Chondrosarcoma, Metastatic, Uncertain Primary Site																				1
Fibrosarcoma, Metastatic, Skin																				1
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

#### Special Senses System

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Lacrimal Gland	+	+																		10

#### Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Fibrosarcoma, Metastatic, Skin																				1
Urethra																				1
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

#### SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymphoma Malignant																				3
Mesothelioma Malignant																				1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

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I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
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**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:14  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 500PPM	DAY ON TEST																				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	3	5	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7
		0	5	2	6	6	6	6	7	8	8	0	1	1	1	2	3	3	3	3	3
		6	9	8	4	9	2	5	9	5	5	0	1	2	9	0	1	4	7	7	8
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	1	1	1	3	3	3	3	3	3	4	4	4	4	4	4	4	5	5
		3	6	3	7	8	1	2	2	4	6	6	8	0	0	1	4	4	5	6	6
		8	3	3	2	5	8	0	6	2	1	8	7	8	1	9	7	6	9	7	8

**Alimentary System**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	A	A	+	+	+	+	+
Serosa, Carcinoma, Metastatic, Prostate							X															
Intestine Large, Colon	A	+	+	+	+	+	A	+	+	+	+	+	+	+	A	A	+	+	+	+	+	+
Serosa, Carcinoma, Metastatic, Prostate							X															
Intestine Large, Rectum															+		+	+	A	A	+	+
Intestine Small, Duodenum	A	+	+	+	+	+	A	+	+	+	+	+	+	+	A	A	+	+	+	+	+	+
Serosa, Carcinoma, Metastatic, Prostate							X															
Intestine Small, Ileum	A	+	+	+	+	A	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	A	+	+	+	+	A	A	+	+	+	+	+	+	A	+	+	A	+	+	+	+	+
Liver	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	A	+	+	+	+	+	+
Carcinoma, Metastatic, Prostate							X															
Mesentery							+															
Oral Mucosa															+							
Osteosarcoma															X							
Pancreas	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Carcinoma, Metastatic, Prostate							X															
Salivary Glands	+	+	+	+	+	A	A	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+
Stomach, Forestomach	A	+	+	+	+	A	A	+	+	+	+	+	+	+	+	A	A	+	+	+	+	+
Stomach, Glandular	A	+	+	+	+	A	A	+	+	+	+	+	+	+	A	A	+	+	+	+	+	+

**Cardiovascular System**

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:14  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>CD Rat Male</b> <b>F1 500PPM</b>	DAY ON TEST																				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	3	5	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7
		0	5	2	6	6	6	6	7	8	8	0	1	1	1	2	3	3	3	3	3
		6	9	8	4	9	2	5	9	5	5	0	1	2	9	0	1	4	7	7	7
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	1	1	1	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4
		3	6	3	7	8	1	2	2	4	6	6	8	0	0	1	4	4	5	6	6
		8	3	3	2	5	8	0	6	2	1	8	7	8	1	9	7	6	9	7	8
Blood Vessel		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Endocrine System</b>																					
Adrenal Cortex		+	+	+	A	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+
Adenoma																	X				
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+
Pheochromocytoma Benign																				X	X
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+
Adenoma																X	X				X
Carcinoma																X					
Carcinoma, Metastatic, Prostate															X						
Parathyroid Gland		+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+
Pars Distalis, Adenoma											X	X	X	X	X	X				X	X
Pars Distalis, Adenoma, Multiple																					
Thyroid Gland		A	+	+	+	+	A	+	+	+	A	+	+	+	+	A	+	+	+	+	+
C Cell, Adenoma														X							
C Cell, Carcinoma																					
<b>General Body System</b>																					
Tissue NOS															+						
Abdominal, Carcinoma, Metastatic, Prostate															X						

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:15  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 500PPM	DAY ON TEST																				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	3	5	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7
		0	5	2	6	6	6	6	7	8	8	0	1	1	1	2	3	3	3	3	3
		6	9	8	4	9	2	5	9	5	5	0	1	2	9	0	1	4	7	7	8
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	1	1	1	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5
		3	6	3	7	8	1	2	2	4	6	6	8	0	0	1	4	4	5	6	6
		8	3	3	2	5	8	0	6	2	1	8	7	8	1	9	7	6	9	7	8

### Genital System

Coagulating Gland	A	+	+	+	+	+	A	+	+	+	A	+	+	+	+	+	+	+	+	+	+
Carcinoma, Metastatic, Prostate							X														
Epididymis	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Carcinoma, Metastatic, Prostate							X														
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+
Squamous Cell Carcinoma															X						
Prostate																					+
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+
Carcinoma											X										
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	I	M	+	+	+	+	+	+	+	+	+
Carcinoma											X										
Rete Testes	+	+	+	M	+	A	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+
Seminal Vesicle	A	+	+	+	+	+	A	+	+	A	+	+	+	+	A	A	+	+	+	+	+
Carcinoma, Metastatic, Prostate							X														
Testes	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+
Capsule, Carcinoma, Metastatic, Prostate							X														
Seminoma Benign																					X

### Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	A	+	+	+	+
Lymph Node												+	+								+
Lymph Node, Mandibular	+	+	+	+	+	A	+	+	+	A	+	+	+	+	+	A	+	+	+	+	+

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:15  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 500PPM**

DAY ON TEST	ANIMAL ID																			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	3	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7
	0	5	2	6	6	6	6	7	8	8	0	1	1	1	2	3	3	3	3	3
	6	9	8	4	9	2	5	9	5	5	0	1	2	9	0	1	4	7	7	7
Lymph Node, Mesenteric	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	M	A	+	+	+
Spleen	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	A	+	+	+
Sarcoma																X				
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	I
<b>Integumentary System</b>																				
Mammary Gland	A	+	+	+	+	A	A	+	+	I	A	+	I	+	+	+	A	+	+	+
Fibroadenoma							X							X						
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	A	+	+	M
Fibroma																				
Keratoacanthoma																				X
Lipoma							X													
<b>Musculoskeletal System</b>																				
Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skeletal Muscle																	+			
Carcinoma, Metastatic, Prostate							X													
<b>Nervous System</b>																				
Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	A	+	+	+
Brain, Cerebellum	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	A	A	+	+	+
Brain, Cerebrum	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	A	A	+	+	+
Granular Cell Tumor Malignant							X													
<b>Respiratory System</b>																				

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:15  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>CD Rat Male</b> <b>F1 500PPM</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	2	3	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		0	5	2	6	6	6	6	7	8	8	0	1	1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		6	9	8	4	9	2	5	9	5	5	0	1	2	9	0	1	4	7	7	7	8	8	8	9	9	9	2	3	3	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

#### Respiratory System

Lung	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	
Carcinoma, Metastatic, Prostate												X																		
Nose		+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Squamous Cell Carcinoma													X																	
Trachea		+	+	+	+	+	A	A	+	+	+	A	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+

#### Special Senses System

Eye			A																											
Adventitia, Squamous Cell Carcinoma													X																	
Harderian Gland																														
Lacrimal Gland																														
Zymbal's Gland																														
Squamous Cell Carcinoma												X																		

#### Urinary System

Kidney	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	
Urethra																														
Urinary Bladder	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	
Serosa, Carcinoma, Metastatic, Prostate							X																							

#### SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	
Lymphoma Malignant																	X													

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:15  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 500PPM	DAY ON TEST	0 0																		
		7 7																		
		4 5																		
		4 4 5 5 5 6 8 8 8 9 9 9 9 9 9 9 9 9 9 9 0																		
		0 0																		
ANIMAL ID		0 0																		
		6 7																		
		7 2 2 2 2 6 6 8 8 9 9 8 4 4 4 5 5 8 9 9 7																		
		3 9 7 8 7 4 8 9 0 1 3 7 8 9 0 3 8 9 9 9 9																		
		*TOTALS																		

#### Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Serosa, Carcinoma, Metastatic, Prostate																			1
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Serosa, Carcinoma, Metastatic, Prostate																			1
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	34
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Serosa, Carcinoma, Metastatic, Prostate																			1
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Carcinoma, Metastatic, Prostate																			1
Mesentery																			1
Oral Mucosa																			1
Osteosarcoma																			1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Carcinoma, Metastatic, Prostate																			1
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44

#### Cardiovascular System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:15  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Male**  
**F1 500PPM**

DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5
4	4	5	5	5	6	8	8	8	9	9	9	9	9	9	9	9	9	9	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8
7	2	2	2	2	6	6	8	8	9	9	8	4	4	4	5	8	9	9	7
3	9	7	8	7	4	8	9	0	1	3	7	8	9	0	3	8	9	9	9
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
<b>Endocrine System</b>																			
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Adenoma																			1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pheochromocytoma Benign									X		X		X	X	X				7
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Adenoma									X										5
Carcinoma																			1
Carcinoma, Metastatic, Prostate																			1
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	47
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pars Distalis, Adenoma		X	X	X	X		X	X	X		X		X	X					21
Pars Distalis, Adenoma, Multiple						X													1
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
C Cell, Adenoma																			1
C Cell, Carcinoma														X					1
<b>General Body System</b>																			
Tissue NOS																			1
Abdominal, Carcinoma, Metastatic, Prostate																			1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:16  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 500PPM	DAY ON TEST	0 0																																				
		7 7																																				
		4 5																																				
		4 4 5 5 5 6 8 8 8 9 9 9 9 9 9 9 9 9 9 9 0																																				
		0 0																																				
ANIMAL ID																																						
6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 8 8 8 8 8																																						
7 2 2 2 2 6 6 8 8 9 9 8 4 4 4 5 8 9 9 9 7																																						
3 9 7 8 7 4 8 9 0 1 3 7 8 9 0 3 8 9 9 9 9																																						

\*TOTALS

### Genital System

Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	45	
Carcinoma, Metastatic, Prostate																					1
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		49	
Carcinoma, Metastatic, Prostate																					1
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		49	
Squamous Cell Carcinoma																				X	2
Prostate																				+	2
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		49	
Carcinoma																					1
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		48	
Carcinoma																					1
Rete Testes	+	+	+	+	M	+	+	I	+	+	+	+	+	+	+	+	+	+		44	
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		45	
Carcinoma, Metastatic, Prostate																					1
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		49	
Capsule, Carcinoma, Metastatic, Prostate																					1
Seminoma Benign																					1

### Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Lymph Node		+																		+	8
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	46	

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:16  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Male**  
**F1 500PPM**

DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	4	4	5	5	5	6	8	8	8	9	9	9	9	9	9	9	9	9	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Sarcoma																		1	
Thymus	+	+	+	+		+	+	+	+	+	+	+	+	M	+	M	+	42	
<b>Integumentary System</b>																			
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	42	
Fibroadenoma																		2	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	X	+	+	+	50	
Fibroma																		1	
Keratoacanthoma																		1	
Lipoma														X				2	
<b>Musculoskeletal System</b>																			
Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Skeletal Muscle																		1	
Carcinoma, Metastatic, Prostate																		1	
<b>Nervous System</b>																			
Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Granular Cell Tumor Malignant																		1	
<b>Respiratory System</b>																			

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:16  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

<b>CD Rat Male</b> <b>F1 500PPM</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5
		4	4	5	5	5	6	8	8	8	9	9	9	9	9	9	9	9	9	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		6	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	8	8
		7	2	2	2	6	6	8	8	9	9	8	4	4	4	5	8	9	9	7
		3	9	7	8	7	4	8	9	0	1	3	7	8	9	0	3	8	9	9
		<b>*TOTALS</b>																		

#### Respiratory System

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
Carcinoma, Metastatic, Prostate																				1
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Squamous Cell Carcinoma																				2
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	

#### Special Senses System

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	35	
Adventitia, Squamous Cell Carcinoma																				1
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	37	
Lacrimal Gland	+	+	+	+															14	
Zymbal's Gland																			1	
Squamous Cell Carcinoma																			1	

#### Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Urethra																			1
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Serosa, Carcinoma, Metastatic, Prostate																			1

#### SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymphoma Malignant																			2

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

## P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 14:25:16

**First Dose M/F:** NA / NA

## Lab: NCTR

## Alimentary System

X

## **Cardiovascular System**

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ .. Tissue examined microscopically

### A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:17  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 5PPM/CTL	DAY ON TEST																						
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		4	4	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	
		0	8	6	8	2	5	6	6	8	1	1	2	3	3	3	3	3	3	3	3	3	
		6	6	5	4	7	5	5	9	9	3	3	4	1	4	6	7	7	8	8	9	9	
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	1	1	1	2	3	3	3	3	4	4	4	4	4	5	4	4	5	5	5	5	
		9	2	7	9	5	0	1	2	6	0	1	3	4	5	2	7	7	1	7	9	9	
		2	1	6	9	4	2	9	6	9	0	6	8	9	5	2	3	7	3	4	4	5	
Adrenal Medulla		+	+	+	A	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	
Bilateral, Pheochromocytoma Benign																	X						
Pheochromocytoma Benign																							
Pheochromocytoma Malignant																							
Islets, Pancreatic		+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parathyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	M	+	
Pituitary Gland		+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pars Distalis, Adenoma																							
Thyroid Gland		+	+	+	A	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+	+	
C Cell, Adenoma																							
Follicular Cel, Adenoma																		X					
<b>General Body System</b>																							
NONE																							
<b>Genital System</b>																							
Coagulating Gland		+	+	+	A	+	A	A	+	A	+	+	+	+	A	+	+	+	+	+	+	+	
Epididymis		+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	
Penis																							
Preputial Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sarcoma																							
Squamous Cell Carcinoma								X															
Prostate																	+						
Prostate, Dorsal Lobe		+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:17  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 5PPM/CTL	DAY ON TEST	DAY ON TEST																				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		4	4	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	
		0	8	6	8	2	5	6	6	8	1	1	2	3	3	3	3	3	3	3	3	
		6	6	5	4	7	5	5	9	9	3	3	4	1	4	6	7	7	8	8	9	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	1	1	1	2	3	3	3	3	4	4	4	4	4	5	4	4	5	5	5	
		9	2	7	9	5	0	1	2	6	0	1	3	4	5	2	7	7	1	7	9	
		2	1	6	9	4	2	9	9	6	9	0	6	8	9	5	2	3	7	3	4	5
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
		2	4	6	7	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	
Prostate, Ventral Lobe		+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	
Adenoma																					X	
Rete Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Seminal Vesicle		+	+	A	A	+	A	A	+	A	+	A	+	A	+	+	+	+	+	+	+	
Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Hematopoietic System</b>																						
Bone Marrow		+	+	+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node																						
Lymph Node, Mandibular		+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fibrosarcoma, Metastatic, Skin																					X	
Lymph Node, Mesenteric		+	+	+	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Thymus		+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	
<b>Integumentary System</b>																						
Mammary Gland		+	I	A	+	I	A	A	I	+	+	+	+	+	I	+	+	+	+	+	+	
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fibroma																					X	
Fibrosarcoma																						
Lipoma																						
Sarcoma																						
Schwannoma Malignant																						
Sebaceous Gl, Carcinoma																						

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:17  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 5PPM/CTL	DAY ON TEST																									
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		4	4	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
		0	8	6	8	2	5	6	6	8	1	1	2	3	3	3	3	3	3	3	3	3	3	3	3	
		6	6	5	4	7	5	5	9	9	3	3	4	1	4	6	7	7	7	8	8	9	9	9	9	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	1	1	1	2	3	3	3	3	4	4	4	4	4	5	4	4	4	5	5	5	5	5	6	
		9	2	7	9	5	0	1	2	6	0	1	3	4	5	2	7	7	7	1	7	7	7	9	9	0
		2	1	6	9	4	2	9	9	6	9	0	6	8	9	5	2	3	7	3	7	3	4	4	5	6
Squamous Cell Carcinoma																										X
<b>Musculoskeletal System</b>																										
Bone, Femur	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Nervous System</b>																										
Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Brain, Cerebellum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Granular Cell Tumor Benign																										X
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Respiratory System</b>																										
Lung	+	+	+	+	+	A	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Fibrosarcoma, Metastatic, Skin																										X
Squamous Cell Carcinoma, Metastatic, Preputial Gland																										
Nose	+	+	+	+	+	A	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	
Trachea	+	+	+	+	+	+	A	+	A	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	
<b>Special Senses System</b>																										
Eye																+	A	+	+	+	+	+	+	+	+	+
Harderian Gland																+	+	+	+	+	+	+	+	+	+	+
Lacrimal Gland																+	+	+	+	+	+	+	+	+	+	+
<b>Urinary System</b>																										

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92

Test Type: MULTIGEN CHRONIC

Route: DOSED FEED

Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Date Report Requested: 10/22/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 14:25:17

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male F1 5PPM/CTL	DAY ON TEST	Systemic Lesions																				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		4	4	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
		0	8	6	8	2	5	6	6	8	1	1	2	3	3	3	3	3	3	3	3	3
		6	6	5	4	7	5	5	9	9	3	3	4	1	4	6	7	7	8	8	9	9
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	1	1	1	2	3	3	3	3	4	4	4	4	4	5	4	4	5	5	5	5
		9	2	7	9	5	0	1	2	6	0	1	3	4	5	2	7	7	1	7	9	9
		2	1	6	9	4	2	9	9	6	9	0	6	8	9	5	2	3	7	3	4	5
Kidney		+	+	+	A	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	
Urethra																						
Urinary Bladder		+	+	+	+	+	+	+	+	A	+	+	+	+	A	+	+	+	+	+	+	
<b>SYSTEMIC LESIONS</b>		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Multiple Organ		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Leukemia Mononuclear																X						
Lymphoma Malignant																X						

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:17  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 5PPM/CTL	DAY ON TEST	0 0																		
		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7																		
		4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5 5 5 5																		
		3 3 4 4 4 4 5 8 9 9 9 9 0 0 0 0 2 2 2 2																		
		0 0																		
ANIMAL ID		0 0																		
		0 0																		
		6 7 7 7 7 7 8 7 7 8 8 8 8 8 8 8 8 9 9 9 9																		
		8 0 1 3 4 4 7 0 9 9 5 6 9 9 9 9 0 2 2 2 2																		
		5 0 6 7 0 1 4 4 8 9 6 0 2 3 4 5 3 0 0 3																		
		*TOTALS																		

#### Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	37
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Hepatocellular Adenoma																			1
Mesentery																			1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46

#### Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48

#### Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Adenoma																			2

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:17  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 5PPM/CTL**

DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	
	3	3	4	4	4	4	5	8	9	9	9	9	0	0	0	0	2	2	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
Bilateral, Pheochromocytoma Benign																			1
Pheochromocytoma Benign																			2
Pheochromocytoma Malignant																			1
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Pars Distalis, Adenoma	X	X		X					X			X	X	X	X			18	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	
C Cell, Adenoma																		1	
Follicular Cel, Adenoma																		1	

### General Body System

NONE

### Genital System

Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Penis																		1
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Sarcoma																		1
Squamous Cell Carcinoma												X						2
Prostate																		8
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:18  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Male**  
**F1 5PPM/CTL**

	DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5
	3	3	4	4	4	4	5	8	9	9	9	9	0	0	0	0	2	2	2	2
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Adenoma																				1
Rete Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
<b>Hematopoietic System</b>																				
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Lymph Node																				14
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Fibrosarcoma, Metastatic, Skin																				1
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
<b>Integumentary System</b>																				
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Fibroma																				X
Fibrosarcoma																				1
Lipoma																				X
Sarcoma																				1
Schwannoma Malignant																				1
Sebaceous Gl, Carcinoma																				1
																				X

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:18  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 5PPM/CTL	DAY ON TEST																			*TOTALS
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Squamous Cell Carcinoma																				1
<b>Musculoskeletal System</b>																				
Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
<b>Nervous System</b>																				
Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Granular Cell Tumor Benign																				1
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
<b>Respiratory System</b>																				
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Fibrosarcoma, Metastatic, Skin																				1
Squamous Cell Carcinoma, Metastatic, Preputial Gland																				1
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
<b>Special Senses System</b>																				
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	37	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	39	
Lacrimal Gland																				14
<b>Urinary System</b>																				

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:18  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Male  
F1 5PPM/CTL**

DAY ON TEST																			<b>*TOTALS</b>
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	
	3	3	4	4	4	4	5	8	9	9	9	9	0	0	0	0	2	2	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	7	7	7	7	7	8	7	7	8	8	8	8	8	8	8	9	9	
	8	0	1	3	4	4	7	0	9	9	5	6	9	9	9	9	0	2	
	5	0	6	7	0	1	4	4	8	9	6	0	2	3	4	5	3	0	
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Urethra																		1	
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
<b>SYSTEMIC LESIONS</b>																			
Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Leukemia Mononuclear																		1	
Lymphoma Malignant																		1	

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:18  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 100PPM/CTL	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2	3	3	4	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
		6	5	6	5	0	0	1	2	3	4	4	7	7	0	0	2	3	3	3	3	3	3	3	3	4	4	4	
		7	0	2	6	3	5	0	7	1	4	8	6	8	2	3	2	7	7	7	7	8	8	8	8	2	2	4	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	1	2	2	2	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	5	6	6	6	
		4	6	6	1	1	2	2	2	4	6	8	9	4	4	8	9	3	7	7	0	8	1	1	2	2	7	3	7
		2	1	4	6	7	5	6	0	9	6	0	6	9	8	1	0	4	5	6	3	3	4	5	9	0	6	9	1

Alimentary System

Esophagus	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	A	A	A	+	+	M	+	A	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	
Intestine Large, Colon	+	+	A	A	A	+	+	+	A	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Rectum																													
Intestine Small, Duodenum	+	+	A	A	A	+	+	+	A	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Ileum	+	A	A	A	A	+	+	+	A	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Adenocarcinoma																													
Intestine Small, Jejunum	+	A	A	A	A	+	+	+	A	+	+	A	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Liver	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Cholangiocarcinoma						X																							
Hepatocellular Adenoma																													
Mesentery																		+											
Pancreas	+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Salivary Glands	+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Stomach, Forestomach	+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	
Stomach, Glandular	+	+	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	

Cardiovascular System

Blood Vessel	+	+	A	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	A	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Endocrine System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:18  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 100PPM/CTL	DAY ON TEST																						
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	2	3	3	4	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7
		6	5	6	5	0	0	1	2	3	4	4	7	7	0	2	3	3	3	3	3	3	3
		7	0	2	6	3	5	0	7	1	4	8	6	8	2	3	2	7	7	7	8	8	8
Adrenal Cortex		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+
Adenoma																							
Adrenal Medulla		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+
Pheochromocytoma Malignant																					M	+	+
Islets, Pancreatic		+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+
Adenoma																					X		
Parathyroid Gland		+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+
Pituitary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pars Distalis, Adenoma																					X	X	X
Thyroid Gland		+	+	A	A	+	+	+	+	A	+	+	A	+	+	+	+	A	+	+	+	+	+
C Cell, Carcinoma																					X		
<b>General Body System</b>																							
NONE																							
<b>Genital System</b>																							
Coagulating Gland		+	+	+	A	A	+	+	+	A	+	+	+	+	+	+	+	+	A	+	+	+	+
Adenocarcinoma, Metastatic, Prostate																					X		
Epididymis		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+
Preputial Gland		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adventitia, Squamous Cell Carcinoma																					X		
Squamous Cell Carcinoma																							
Prostate																					+	+	
Prostate, Dorsal Lobe		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:19  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 100PPM/CTL	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	3	3	4	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7
	6	5	6	5	0	0	1	2	3	4	4	7	7	0	0	2	3	3	3	3	3	3
	7	0	2	6	3	5	0	7	1	4	8	6	8	2	3	2	7	7	7	8	8	8
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	1	2	2	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
		4	6	6	1	1	2	2	2	4	6	8	9	4	4	8	9	3	7	7	0	8
		2	1	4	6	7	5	6	0	9	6	0	6	9	8	1	0	4	5	6	3	4
Adenocarcinoma		X																				
Prostate, Ventral Lobe		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+
Adenocarcinoma			X																			
Rete Testes		+	+	+	+	M	M	+	+	+	+	+	+	M	+	+	+	+	+	+	+	I
Seminal Vesicle		+	+	+	A	+	+	+	+	A	+	+	+	A	+	+	+	+	A	+	+	+
Adenocarcinoma, Metastatic, Prostate			X																			
Testes		+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+
Hematopoietic System																						
Bone Marrow		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+
Lymph Node																						+
Lymph Node, Mandibular		+	+	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+
Lymph Node, Mesenteric		+	+	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+
Spleen		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+
Hemangiosarcoma																						X
Thymus		I	+	+	A	+	+	I	+	M	+	+	+	M	+	I	I	+	A	+	+	+
Integumentary System																				M	+	+
Mammary Gland		I	+	M	I	I	+	I	I	M	+	I	I	+	M	+	+	A	+	+	+	I
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Keratoacanthoma																						
Lipoma																						
Sarcoma																						
Schwannoma Benign																						

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

X

X

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:19  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 100PPM/CTL	DAY ON TEST																							
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Squamous Cell Carcinoma		X																						
<b>Musculoskeletal System</b>																								
Bone, Cranium																								
Osteoma																								
Bone, Femur		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<b>Nervous System</b>																								
Brain, Brain Stem		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	
Brain, Cerebellum		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	
Astrocytoma Malignant																				X				
Granular Cell Tumor Malignant																								
Brain, Cerebrum		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	
Astrocytoma Malignant																								
Granular Cell Tumor Benign																								
Granular Cell Tumor Malignant																				X				
<b>Respiratory System</b>																								
Lung		+	+	A	A	A	+	+	+	A	+	+	+	+	+	+	+	+	A	+	+	+	+	
Nose		+	+	A	A	+	+	+	+	+	+	+	+	A	+	+	+	+	A	+	+	+	+	
Squamous Cell Carcinoma																				X				
Trachea		+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	
<b>Special Senses System</b>																								
Eye																			+	+	+	+	+	

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:19  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 100PPM/CTL	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	2	3	3	4	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7
	6	5	6	5	0	0	1	2	3	4	4	7	7	0	0	2	3	3	3	3	3	3
	7	0	2	6	3	5	0	7	1	4	8	6	8	2	3	2	7	7	7	7	8	8
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	2	2	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
	4	6	6	1	1	2	2	2	4	6	8	9	4	4	8	9	3	7	7	0	8	1
	2	1	4	6	7	5	6	0	9	6	0	6	9	8	1	0	4	5	6	3	3	4
Eye																						
Harderian Gland																						
Lacrimal Gland																						
Zymbal's Gland																						
Carcinoma																						
Urinary System																						
Kidney	+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+
Urethra																						
Urinary Bladder	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+
SYSTEMIC LESIONS																						
Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+
Lymphoma Malignant																			X			

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:19  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 100PPM/CTL**

DAY ON TEST	0 0																	
	7 7																	
	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5 5 5																	
	4 5 5 5 5 6 6 6 7 8 9 9 9 9 9 0 0 2 2 2 2																	
	0 0																	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	9	7	7	8	8	8	8	8	9	9
	4	3	3	7	7	6	6	7	0	9	8	5	9	9	2	8	0	2
	3	3	4	2	3	8	9	0	6	7	5	7	0	1	5	7	1	1

\*TOTALS

#### Alimentary System

Esophagus	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Intestine Large, Cecum	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42
Intestine Large, Colon	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Intestine Large, Rectum	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	33
Intestine Small, Duodenum	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Intestine Small, Ileum	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42
Adenocarcinoma																	X	1
Intestine Small, Jejunum	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42
Liver	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Cholangiocarcinoma																		1
Hepatocellular Adenoma		X																1
Mesentery																		1
Pancreas	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Salivary Glands	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Stomach, Forestomach	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Stomach, Glandular	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44

#### Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48

#### Endocrine System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:19  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 100PPM/CTL**

	DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5
	4	5	5	5	5	6	6	6	7	8	9	9	9	9	0	0	2	2	2	2
Adrenal Cortex	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Adenoma											X									1
Adrenal Medulla	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Pheochromocytoma Malignant											X									1
Islets, Pancreatic	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Adenoma																				1
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	47
Pituitary Gland	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	I	+	48
Pars Distalis, Adenoma	X	X										X	X							13
Thyroid Gland	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
C Cell, Carcinoma																				1
<b>General Body System</b>																				
NONE																				
<b>Genital System</b>																				
Coagulating Gland	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Adenocarcinoma, Metastatic, Prostate																				1
Epididymis	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Preputial Gland	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Adventitia, Squamous Cell Carcinoma																				1
Squamous Cell Carcinoma	X																			1
Prostate																				6
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:19  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 100PPM/CTL**

	DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5
	4	5	5	5	5	6	6	6	7	8	9	9	9	9	0	0	2	2	2	2
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	9	7	7	8	8	8	8	8	9	9	9	9
	4	3	3	7	7	6	6	7	0	9	8	5	9	9	2	8	0	2	2	2
	3	3	4	2	3	8	9	0	6	7	5	7	0	1	5	7	1	1	1	2
<b>Hematopoietic System</b>																				1
Bone Marrow	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Lymph Node		+																		1
Lymph Node, Mandibular	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Lymph Node, Mesenteric	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Spleen	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Hemangiosarcoma																				1
Thymus	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
<b>Integumentary System</b>																				1
Mammary Gland	A	+	+	+		+	+	+		+	+		+	+	+	+	+	+	+	34
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Keratoacanthoma	X																			1
Lipoma																				1
Sarcoma																				1
Schwannoma Benign	X																			1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:20  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Male**  
**F1 100PPM/CTL**

DAY ON TEST	0 0																	
	7 7																	
ANIMAL ID	4 4																	
	5 5 5 5 6 6 6 7 8 9 9 9 9 9 9 0 0 2 2 2 2																	
Squamous Cell Carcinoma	0 0	1																

#### Musculoskeletal System

Bone, Cranium	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1
Osteoma																		1
Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

#### Nervous System

Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Astrocytoma Malignant																		1
Granular Cell Tumor Malignant																		1
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Astrocytoma Malignant																		1
Granular Cell Tumor Benign		X																1
Granular Cell Tumor Malignant																		1

#### Respiratory System

Lung	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Nose	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Squamous Cell Carcinoma																		1
Trachea	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46

#### Special Senses System

Eye	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	33
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

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**CD Rat Male**  
**F1 100PPM/CTL**

	DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5
	4	5	5	5	5	6	6	6	7	8	9	9	9	9	0	0	2	2	2	2
<b>Eye</b>	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	33
Harderian Gland	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	33
Lacrimal Gland		+	+		+	+													+	12
Zymbal's Gland																				1
Carcinoma																				1
<b>Urinary System</b>																				
Kidney	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Urethra																			+	1
Urinary Bladder	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
<b>SYSTEMIC LESIONS</b>																				
Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymphoma Malignant																				2

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Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
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CD Rat Male F1 500PPM/CTL	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		4	5	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
		4	3	6	8	7	7	9	9	0	1	2	2	3	3	3	3	3	3	3	4	4
		9	4	8	8	4	5	8	9	5	1	1	7	7	7	7	8	8	8	9	9	4
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	1	1	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6
		0	3	8	0	4	4	8	8	9	0	3	4	7	7	8	1	2	2	2	7	8
		5	8	0	2	3	8	1	4	6	0	4	1	8	9	0	6	1	2	3	4	5

**Alimentary System**

Esophagus	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	A	A	A	+	+	A	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	A	+	A	+	+	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+
Adenoma																				X		
Intestine Large, Rectum																						
Intestine Small, Duodenum	A	A	A	+	+	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+
Sarcoma																						
Intestine Small, Ileum	A	A	A	+	+	A	+	+	A	+	+	A	+	+	+	+	+	+	A	+	+	+
Intestine Small, Jejunum	A	A	A	+	+	A	+	+	A	+	+	A	+	+	+	+	+	+	A	+	+	+
Liver	A	+	+	+	+	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+
Hepatocellular Adenoma																				X		
Mesentery																			+			
Pancreas	A	+	+	+	+	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+
Acinar Cell, Adenoma																				X		
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Glandular	A	A	+	+	+	+	+	+	A	+	+	A	+	+	M	+	+	+	+	+	+	+

**Cardiovascular System**

Blood Vessel	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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Experiment Number: 99930-92  
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### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:20  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 500PPM/CTL	DAY ON TEST																				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		4	5	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7
		4	3	6	8	7	7	9	9	0	1	2	2	3	3	3	3	3	3	3	3
		9	4	8	8	4	5	8	9	5	1	1	7	7	7	7	8	8	8	8	9
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	1	1	2	3	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5
		0	3	8	0	4	4	8	8	9	0	3	4	7	7	8	1	2	2	2	7
		5	8	0	2	3	8	1	4	6	0	4	1	8	9	0	6	1	2	3	4

#### Endocrine System

Adrenal Cortex	A	+	+	A	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+
Adenoma																								
Adrenal Medulla	A	+	+	A	+	+	+	+	A	+	+	+	M	+	+	+	+	+	+	+	+	+	M	+
Pheochromocytoma Benign																	X							
Pheochromocytoma Complex																								
Pheochromocytoma Malignant																								
Islets, Pancreatic	A	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adenoma																	X							
Parathyroid Gland	+	+	+	+	M	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	I	+	
Adenoma																	X							
Pituitary Gland	A	+	+	+	+	+	+	+	A	+	+	+	+	+	M	+	+	+	+	+	+	+	+	
Pars Distalis, Adenoma																X								
Pars Distalis, Adenoma, Multiple																X								
Thyroid Gland	A	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C Cell, Adenoma																	X							
Follicular Cel, Adenoma																	X							

#### General Body System

NONE

#### Genital System

Coagulating Gland	A	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
-------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:21  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 500PPM/CTL	DAY ON TEST																							
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		1	1	1	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	
		0	3	8	0	4	4	8	8	9	0	3	4	7	7	8	1	2	2	2	7	8	9	
		5	8	0	2	3	8	1	4	6	0	4	1	8	9	0	6	1	2	3	4	8	0	
Epididymis		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Preputial Gland		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Squamous Cell Carcinoma															X									
Prostate		A																						
Prostate, Dorsal Lobe		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Carcinoma, Metastatic, Urinary Bladder																								
Prostate, Ventral Lobe		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Carcinoma			X																					
Carcinoma, Metastatic, Urinary Bladder																								
Rete Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Seminal Vesicle		A	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	
Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Seminoma Benign																								
Hematopoietic System																								
Bone Marrow		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node			+	+																				
Lymph Node, Mandibular		A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymph Node, Mesenteric		A	A	+	+	+	+	+	+	A	M	+	+	+	+	+	+	+	+	+	+	+	+	
Spleen		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Thymus		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Integumentary System																								
Mammary Gland		I	A	I	+	+	+	+	+	A	I	+	+	+	+	+	+	+	+	+	+	+	+	

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:21  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 500PPM/CTL	DAY ON TEST																						
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	1	1	2	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5	6	6
		0	3	8	0	2	3	8	1	4	6	0	3	4	7	7	8	1	2	2	2	7	8
		5	8	0	2	3	8	1	4	6	0	4	1	8	9	0	6	1	2	3	4	8	0
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fibroma																							X
Sarcoma																							
Musculoskeletal System																							
Bone, Femur		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Skeletal Muscle																							
Nervous System																							
Brain, Brain Stem		A	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	
Astrocytoma Malignant																							
Glioma Malignant																							
Brain, Cerebellum		A	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	
Brain, Cerebrum		A	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	
Astrocytoma Malignant																							
Glioma Malignant																							
Respiratory System																							
Lung		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Nose		A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trachea		A	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	
Special Senses System																							
Ear																+							
Neural Crest Tumor																X							

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue



Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:21  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F1 500PPM/CTL	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5
		4	4	5	8	8	8	9	9	9	9	9	9	0	0	0	0	2	3
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	8	8	8	7	7	8	8	8	8	9	8	8	8	8	9
		3	3	7	0	0	0	8	8	2	5	5	5	0	6	6	8	8	2
		8	9	1	0	1	2	6	7	4	3	8	9	4	4	5	8	9	5

\*TOTALS

#### Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Adenoma																			1
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	39
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Sarcoma																			1
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Hepatocellular Adenoma																			1
Mesentery																			1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Acinar Cell, Adenoma																			1
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45

#### Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:21  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 500PPM/CTL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5
	4	4	5	8	8	8	9	9	9	9	9	9	9	0	0	0	2	3
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	8	8	8	7	7	8	8	8	8	9	8	8	8	8	9
	3	3	7	0	0	0	8	8	2	5	5	5	0	6	6	8	8	2
	8	9	1	0	1	2	6	7	4	3	8	9	4	4	5	8	9	5

\*TOTALS

#### Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	
Adenoma																		X	1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45	
Pheochromocytoma Benign																		X	4
Pheochromocytoma Complex																		X	1
Pheochromocytoma Malignant																		X	2
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Adenoma																		X	3
Parathyroid Gland	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	
Adenoma																			1
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Pars Distalis, Adenoma	X																	X	15
Pars Distalis, Adenoma, Multiple																		X	1
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
C Cell, Adenoma																			1
Follicular Cel, Adenoma																		X	1

#### General Body System

NONE																		
Genital System																		

Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
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\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:21  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 500PPM/CTL**

	DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5
		4	4	5	8	8	8	9	9	9	9	9	9	9	0	0	0	0	2	3
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	8	8	8	7	7	8	8	8	8	9	8	8	8	8	9	9
		3	3	7	0	0	0	8	8	2	5	5	5	0	6	6	8	8	2	2
		8	9	1	0	1	2	6	7	4	3	8	9	4	4	5	8	9	5	4
Epididymis		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Preputial Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Squamous Cell Carcinoma																				1
Prostate																				3
Prostate, Dorsal Lobe		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Carcinoma, Metastatic, Urinary Bladder																				1
Prostate, Ventral Lobe		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Carcinoma																				1
Carcinoma, Metastatic, Urinary Bladder																				1
Rete Testes		+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	49
Seminal Vesicle		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Seminoma Benign													X							1
<b>Hematopoietic System</b>																				
Bone Marrow		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Lymph Node																				9
Lymph Node, Mandibular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Spleen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Thymus		+	+	M	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	45
<b>Integumentary System</b>																				
Mammary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:22  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F1 500PPM/CTL**

DAY ON TEST	ANIMAL ID																		*TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5
4	4	5	8	8	8	9	9	9	9	9	9	9	9	0	0	0	0	2	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	7	7	8	8	8	7	7	8	8	8	8	9	8	8	8	8	9	9	9
3	3	7	0	0	0	8	8	2	5	5	5	0	6	6	6	8	8	2	2
8	9	1	0	1	2	6	7	4	3	8	9	4	4	5	8	9	5	4	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Fibroma															X			2	
Sarcoma																		1	
<b>Musculoskeletal System</b>																			
Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Skeletal Muscle																		2	
<b>Nervous System</b>																			
Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Astrocytoma Malignant														X				1	
Glioma Malignant																		1	
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Astrocytoma Malignant														X				1	
Glioma Malignant																		1	
<b>Respiratory System</b>																			
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
<b>Special Senses System</b>																			
Ear																		1	
Neural Crest Tumor																		1	

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Male**  
**F1 500PPM/CTL**

DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5
4	4	5	8	8	8	9	9	9	9	9	9	9	9	0	0	0	0	2	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	7	7	8	8	8	7	7	8	8	8	8	9	8	8	8	8	9	9	9
3	3	7	0	0	0	8	8	2	5	5	5	0	6	6	6	8	8	2	2
8	9	1	0	1	2	6	7	4	3	8	9	4	4	5	8	9	5	4	
Neural Crest Tumor																			1
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	41
Lacrimal Gland																			5
<b>Urinary System</b>																			
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Urethra																			2
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Transit Epithe, Carcinoma																			1
<b>SYSTEMIC LESIONS</b>																			
Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lymphoma Malignant																			1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

CD Rat Male F3 0 PPM	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	4	4	4	4	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7
		6	0	6	9	9	9	0	5	8	0	0	3	6	6	8	9	2	4	4	5	5
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	0	1
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	1	1	1	1	1	1	2	2	2	2	3	3	4	4	6	9	9	9	9	9
		5	0	2	4	4	4	5	0	3	9	9	5	9	1	4	2	3	4	4	7	7
		5	4	6	4	6	7	1	6	9	5	6	1	8	3	3	2	8	7	8	4	0

**Alimentary System**

Esophagus	A	A	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																		X					
Intestine Large, Cecum	A	A	A	A	A	A	+	A	+	+	M	+	+	+	A	A	+	+	+	+	+	+	
Intestine Large, Colon	A	A	A	A	A	A	+	A	+	+	M	+	+	+	A	A	+	+	+	+	+	+	
Adenocarcinoma																						X	
Intestine Large, Rectum	A																						
Leiomyosarcoma																X							
Intestine Small, Duodenum	A	A	A	A	A	A	+	A	+	+	M	+	+	+	A	A	+	+	+	+	+	+	
Adenocarcinoma																						X	
Intestine Small, Ileum	A	A	A	A	A	A	+	A	+	A	M	+	+	+	A	A	+	+	+	+	+	+	
Intestine Small, Jejunum	A	A	A	A	A	A	A	A	+	+	M	+	+	+	A	A	+	+	+	+	+	+	
Liver	+	+	+	+	+	+	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+	
Hepatocellular Adenoma																X							
Hepatocellular Carcinoma																							
Pancreas	A	M	I	A	+	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+	+	
Salivary Glands	A	+	+	A	+	+	+	+	+	+	M	+	+	+	A	+	+	+	+	+	+	+	
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																		X					
Stomach, Forestomach	A	A	A	A	A	A	+	+	+	+	M	+	+	+	A	+	+	+	+	+	+	+	
Stomach, Glandular	A	A	A	A	A	A	+	A	+	+	M	+	+	+	A	A	+	+	+	+	+	+	

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Date Report Requested:** 10/22/2014

**Test Compound:** Endocrine disruptor (Genistein)

**Time Report Requested:** 14:25:22

**CAS Number:** 446-72-0

**First Dose M/F:** NA / NA

**Lab:** NCTR

<b>CD Rat Male</b> <b>F3 0 PPM</b>	DAY ON TEST																							
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	4	4	4	4	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7
		6	0	6	9	9	9	0	5	8	0	0	3	6	6	8	9	2	4	4	5	5	5	5
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	0	1	1	2
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	0	1	1	1	1	1	1	2	2	2	2	3	3	4	4	6	9	9	9	9	9	9	1	1
	5	0	2	4	4	4	5	0	3	9	9	5	9	1	4	2	3	4	4	7	7	7	9	8
	5	4	6	4	6	7	1	6	9	5	6	1	8	3	3	2	8	7	8	4	0	1	2	3

#### Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																			X							
Heart	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pericardium, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																			X							

#### Endocrine System

Adrenal Cortex	A	+	+	A	+	+	+	A	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Adrenal Medulla	A	+	+	A	+	+	+	A	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pheochromocytoma Benign																											
Pheochromocytoma Malignant																											
Islets, Pancreatic	A	M	I	+	+	+	+	A	+	+	M	+	+	+	+	A	+	+	+	+	+	+	+	I	+	+	
Adenoma																									X		X
Parathyroid Gland	I	+	+	+	+	+	+	+	+	M	I	+	+	+	+	M	+	+	+	M	+	M	+	+	+	M	
Pituitary Gland	A	+	+	A	+	+	+	+	+	M	+	+	+	+	+	+	M	+	+	M	+	M	+	+	+	+	
Pars Distalis, Adenoma											X	X	X	X	X	X		X	X		X	X	X	X	X	X	
Pars Distalis, Adenoma, Multiple																	X	X		X	X	X	X	X	X	X	
Thyroid Gland	+	+	A	A	+	A	+	A	+	+	M	+	+	+	A	A	+	M	+	+	+	+	+	+	+	+	
Bilateral, C Cell, Adenoma																											
C Cell, Adenoma																			X								

#### General Body System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:22  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

CD Rat Male F3 0 PPM	DAY ON TEST																										
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		2	4	4	4	4	4	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	
		6	0	6	9	9	9	0	5	8	0	0	3	6	6	8	9	2	4	4	5	5	5	5	5	5	
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	0	1	1	1	2	3	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
		0	1	1	1	1	1	1	2	2	2	2	3	3	4	4	6	9	9	9	9	9	9	9	9	1	
		5	0	2	4	4	4	5	0	3	9	9	5	9	1	4	2	3	4	4	7	7	7	7	9	9	8
		5	4	6	4	6	7	1	6	9	5	6	1	8	3	3	2	8	7	8	4	0	1	2	3	0	

NONE

**Genital System**

Coagulating Gland	A	A	A	A	+	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+		
Epididymis	+	A	+	+	+	+	+	+	+	+	M	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+		
Preputial Gland	+	+	+	A	+	+	+	+	+	+	M	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+		
Prostate					+	+					M	+																
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Prostate, Ventral Lobe	+	+	A	+	+	+	+	+	+	+	M	+	+	+	M	+	+	A	+	+	+	+	+	+	+	+		
Rete Testes	+	+	+	+	M	M	+	+	+	+	M	+	+	+	+	+	+	M	M	+	+	+	+	+	+	+		
Seminal Vesicle	A	A	A	A	+	A	+	A	+	A	M	+	+	+	A	+	+	A	+	+	+	+	+	+	+	+		
Testes	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Interstit Cell, Adenoma																				X								
Seminoma Benign																												

**Hematopoietic System**

Bone Marrow	+	+	+	+	+	A	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+		
Lymph Node	+	+																A	+									
Lymph Node, Mandibular	+	+	+	+	+	A	+	+	+	+	M	+	+	+	A	A	+	+	+	+	+	+	+	+	+			
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																			X									
Lymph Node, Mesenteric	A	+	A	+	+	A	+	+	+	+	M	+	+	+	A	A	+	A	+	+	+	+	+	+	+	+		
Spleen	+	+	+	+	+	+	+	A	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Sarcoma																												

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F3 0 PPM	DAY ON TEST	ANIMAL ID																			
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	4	4	4	4	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7
		6	0	6	9	9	9	0	5	8	0	0	3	6	8	9	2	4	4	5	5
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	0
Thymus		A	+	+	+	+	+	A	+	+	+	+	M	+	+	+	A	A	+	+	+
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																			X		
Integumentary System																					
Mammary Gland		A	I	I	A	I	A	+	A	+	I	M	I	+	+	A	M	I	+	+	+
Skin		+	A	+	+	+	+	A	+	+	M	+	+	+	+	+	+	+	+	+	+
Keratoacanthoma																					
Schwannoma Malignant																					
Squamous Cell Carcinoma																					
Musculoskeletal System																					
Bone, Cranium																					
Bone, Femur		+	A	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+
Skeletal Muscle																					
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																		X			
Nervous System																					
Brain, Brain Stem		A	+	+	A	A	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+
Brain, Cerebellum		A	+	+	A	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+	+
Astrocytoma Malignant																					
Brain, Cerebrum		A	+	+	A	A	+	+	A	+	+	M	+	+	+	A	+	+	+	+	+
Astrocytoma Malignant																					

\* ..Total animals with tissue examined microscopically; Total animals with tumor

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+ ..Tissue examined microscopically

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X ..Lesion present

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I ..Insufficient tissue

Experiment Number: 99930-92  
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 Route: DOSED FEED  
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P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F3 0 PPM	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	4	4	4	4	4	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7
		6	0	6	9	9	9	0	5	8	0	0	3	6	6	8	9	2	4	4	5	5	5	5	5	5	5	5
		0	2	8	4	7	7	6	0	1	6	9	5	2	5	3	5	9	2	4	0	1	1	1	2	2	3	3
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Respiratory System

Lung	A	+	+	A	+	+	+	+	+	M	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																		X									
Nose	A	+	+	A	+	+	+	A	+	M	+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+
Trachea	A	+	+	A	+	A	+	A	+	M	+	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																		X									

Special Senses System

Eye	A									M	+	+	A	A	+	A	+	+	+	+	+	+	+	+	+	+
Harderian Gland	A									M	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+

Urinary System

Kidney	A	+	+	A	+	A	+	A	+	M	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+
Urinary Bladder	A	+	I	A	+	A	+	A	+	M	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+

SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Leukemia	X																										
Lymphoma Malignant	X			X																							

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F3 0 PPM	DAY ON TEST	0 0																																								
		7 7																																								
		5 5																																								
		4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6 6																																								
		0 0																																								
ANIMAL ID																																										
0 1 0 1																																										
1 0 1 1 2 0 0 0 0 0 1 1 1 1 1 1 1 1 1 2 1 1 1																																										
4 7 7 7 0 4 4 7 9 9 3 3 3 3 3 3 3 3 9 0 5 7 7																																										
7 7 8 0 4 5 2 8 9 0 1 2 3 4 5 6 9 9 4 5 5 6																																										

\*TOTALS

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																						1
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	41	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	41	
Adenocarcinoma																						1
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	38	
Leiomyosarcoma																						1
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	41	
Adenocarcinoma																						2
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	40	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Hepatocellular Adenoma																						1
Hepatocellular Carcinoma																						1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45	
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																						1
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44	
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	41	

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:23  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 0 PPM**

DAY ON TEST	0 0																					
	7 7																					
	5 5																					
	4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6																					
	0 0	1 1	0 1 1 2 0 0 0 0 0 1 1 1 1 1 1 1 1 1 2 1 1 1	4 7 7 0 4 4 7 9 9 3 3 3 3 3 3 3 3 9 0 5 7 7	7 7 8 0 4 5 2 8 9 0 1 2 3 4 5 6 9 9 4 5 5 6	*TOTALS																
<b>Cardiovascular System</b>																						
Blood Vessel	+ +	51																				
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	X X	1																				
Heart	+ +	51																				
Pericardium, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site	X X	1																				
<b>Endocrine System</b>																						
Adrenal Cortex	+ +	48																				
Adrenal Medulla	+ +	48																				
Pheochromocytoma Benign	X X	4																				
Pheochromocytoma Malignant	X X	1																				
Islets, Pancreatic	+ +	45																				
Adenoma	X X	3																				
Parathyroid Gland	+ + + + M M + + + + + + + + + + + + + + + +	41																				
Pituitary Gland	+ +	49																				
Pars Distalis, Adenoma	X X	16																				
Pars Distalis, Adenoma, Multiple	X X	1																				
Thyroid Gland	+ +	44																				
Bilateral, C Cell, Adenoma	X X	1																				
C Cell, Adenoma	X X	1																				
<b>General Body System</b>																						
* ..Total animals with tissue examined microscopically; Total animals with tumor	M ..Missing tissue																					
+ ..Tissue examined microscopically	A ..Autolysis precludes evaluation																					
X ..Lesion present	BLANK ..Not examined microscopically																					
I ..Insufficient tissue																						

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		7 7																	
		5 5																	
		4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6																	
		0 0																	
	ANIMAL ID	1 1																	
		0 1 1 2 0 0 0 0 0 1 1 1 1 1 1 1 1 1 2 1 1 1																	
		4 7 7 0 4 4 7 9 9 3 3 3 3 3 3 3 3 9 0 5 7 7																	
		7 7 8 0 4 5 2 8 9 0 1 2 3 4 5 6 9 9 4 5 5 6																	

\*TOTALS

NONE

#### Genital System

Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Prostate																					6
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	51
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Rete Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Interstit Cell, Adenoma																					1
Seminoma Benign																					1

#### Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Lymph Node	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	13
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																				1
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Sarcoma																		X		1

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CD Rat Male F3 0 PPM	DAY ON TEST																			*TOTALS
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		0	1	1	2	0	0	0	0	1	1	1	1	1	1	1	2	1	1	1
		4	7	7	0	4	4	7	9	9	3	3	3	3	3	3	9	0	5	7
		7	7	8	0	4	5	2	8	9	0	1	2	3	4	5	6	9	4	5
Thymus		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																				1
<b>Integumentary System</b>																				
Mammary Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	39
Skin		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Keratoacanthoma																	X			1
Schwannoma Malignant																				1
Squamous Cell Carcinoma																				1
<b>Musculoskeletal System</b>																				
Bone, Cranium																	+			2
Bone, Femur		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Skeletal Muscle																				1
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																				1
<b>Nervous System</b>																				
Brain, Brain Stem		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Brain, Cerebellum		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Astrocytoma Malignant																				1
Brain, Cerebrum		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Astrocytoma Malignant																X				1

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M ..Missing tissue

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<b>CD Rat Male</b> <b>F3 0 PPM</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6
		ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*TOTALS																								

#### Respiratory System

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																									1
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45	
Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site																									1

#### Special Senses System

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	37
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	38

#### Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45

#### SYSTEMIC LESIONS

Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	52	
Leukemia																									1
Lymphoma Malignant																									2

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CD Rat Male F3 5PPM TO CTL	DAY ON TEST																				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	5	5	5	5	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
		9	2	7	8	9	1	9	5	5	5	5	5	5	5	5	5	5	5	5	5
		5	2	0	7	3	7	4	0	0	1	1	1	1	1	1	1	2	2	4	4
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0	1
		0	1	2	2	2	3	5	2	2	9	9	9	9	9	9	9	2	2	9	9
		5	7	2	7	8	1	6	0	0	7	7	7	7	8	8	8	0	1	9	9
		9	7	7	2	2	0	7	8	5	6	7	8	9	0	1	2	5	5	6	2
		2	2	3	5	6	0	0	7	7	7	7	8	9	0	1	2	2	3	4	0
		7	7	7	2	2	0	7	8	5	6	7	8	9	0	1	2	3	4	1	2
		7	7	7	2	2	0	7	8	5	6	7	8	9	0	1	2	3	4	5	6

#### Alimentary System

Esophagus	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	A	A	A	A	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	A	A	A	A	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum								A	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	A	A	A	A	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	A	A	A	A	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	A	A	A	A	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	A	A	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hepatocellular Carcinoma																	X				
Mesentery																					
Pancreas	+	+	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	A	+	A	A	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Glandular	A	A	A	A	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+

#### Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

#### Endocrine System

Adrenal Cortex	+	+	A	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adrenal Medulla	+	+	A	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		2	5	5	5	5	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
		9	2	7	8	9	1	9	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
		5	2	0	7	3	7	4	0	0	1	1	1	1	1	1	1	1	2	2	4	4		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID		0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	1	1	1		
		0	1	2	2	2	3	5	2	2	9	9	9	9	9	9	9	2	2	9	9	0		
		5	7	2	7	8	1	6	0	0	7	7	7	7	8	8	8	9	0	1	9	9	5	
		9	7	7	2	2	0	7	8	5	6	7	8	9	0	1	2	5	5	6	2	3	4	
		7	7	2	2	0	7	8	5	6	7	8	9	0	1	2	5	5	6	2	3	4	5	
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Pheochromocytoma Benign																						X		
Islets, Pancreatic		+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Adenoma																								
Parathyroid Gland		+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Pituitary Gland		+	+	A	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Pars Distalis, Adenoma																								
Thyroid Gland		X									X	X	X	X				X	X	X		X		
<b>General Body System</b>		A	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Tissue NOS																								
Abdominal, Sarcoma																								
<b>Genital System</b>																								
Coagulating Gland		A	M	A	A	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Epididymis		+	+	A	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Preputial Gland		+	+	A	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Prostate								A	A	A														
Prostate, Dorsal Lobe		+	+	A	A	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Prostate, Ventral Lobe		+	A	A	A	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Rete Testes		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Seminal Vesicle		A	A	A	A	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Interstit Cell, Adenoma																								

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		2	5	5	5	5	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
		9	2	7	8	9	1	9	5	5	5	5	5	5	5	5	5	5	5	5	5
		5	2	0	7	3	7	4	0	0	1	1	1	1	1	1	1	1	2	2	4
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	1	1
		0	1	2	2	2	3	5	2	2	9	9	9	9	9	9	9	2	2	9	9
		5	7	2	7	8	1	6	0	0	7	7	7	7	8	8	8	0	1	9	9
		9	7	7	2	2	0	7	8	5	6	7	8	9	0	1	2	5	6	2	2
		7	7	7	2	2	0	7	8	5	6	7	8	9	0	1	2	3	4	0	1
		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

#### Hematopoietic System

Bone Marrow	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node																					+
Lymph Node, Mandibular	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node, Mesenteric	+	+	A	A	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Sarcoma																					+
Thymus	A	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+

#### Integumentary System

Mammary Gland	A	I	I	A	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Fibroma																X					

#### Musculoskeletal System

Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

#### Nervous System

Brain, Brain Stem	+	A	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Brain, Cerebellum	+	A	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Brain, Cerebrum	+	A	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Astrocytoma Malignant																X					

#### Respiratory System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:25  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F3 5PPM TO CTL	DAY ON TEST																								
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
ANIMAL ID	2	5	5	5	5	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
	9	2	7	8	9	1	9	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
	5	2	0	7	3	7	4	0	0	1	1	1	1	1	1	1	1	1	2	2	4	4	4		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lung	A	A	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	X																								
Site	Adenocarcinoma																								
	Carcinoma, Metastatic, Uncertain Primary																								
Nose	+ A	A	A	A	A	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Squamous Cell Carcinoma																								
Trachea	A	A	A	A	A	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Special Senses System																								
Eye	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Retrobulbar, Carcinoma																								
Harderian Gland	+ +	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Lacrimal Gland																								
Urinary System	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Kidney																								
Urethra	Urethra																								
	A	+	A	A	A	A	+	A	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+		
SYSTEMIC LESIONS	+ +	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	Multiple Organ																								
	Mesothelioma Malignant																								
	X																								

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:25  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F3 5PPM TO CTL	DAY ON TEST																		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	8
		4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	4
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
		0	0	1	1	1	2	2	2	0	0	0	1	1	1	1	1	2	0
		7	7	4	4	8	0	0	0	4	4	7	0	3	3	3	4	8	0
		7	8	1	2	4	2	3	4	8	9	3	0	7	8	9	0	3	1

\*TOTALS

#### Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	42
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Hepatocellular Carcinoma																			1
Mesentery																			1
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43

#### Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48

#### Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	46

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
Test Type: MULTIGEN CHRONIC  
Route: DOSED FEED  
Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
Time Report Requested: 14:25:25  
First Dose M/F: NA / NA  
Lab: NCTR

**CD Rat Male**  
**F3 5PPM TO CTL**

DAY ON TEST	ANIMAL ID																		*TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	4	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	49
0	0	1	1	1	2	2	2	0	0	0	1	1	1	1	1	1	2	0	3
7	7	4	4	8	0	0	0	4	4	7	0	3	3	3	3	4	8	0	2
7	8	1	2	4	2	3	4	8	9	3	0	7	8	9	0	3	1	0	18

Pheochromocytoma Benign

X

3

Islets, Pancreatic

+

49

Adenoma

X

3

Parathyroid Gland

+

46

Pituitary Gland

+

46

Pars Distalis, Adenoma

M

18

Thyroid Gland

+

46

#### General Body System

Tissue NOS

+

1

Abdominal, Sarcoma

X

1

#### Genital System

Coagulating Gland

+

43

Epididymis

+

48

Preputial Gland

+

48

Prostate

+

8

Prostate, Dorsal Lobe

+

47

Prostate, Ventral Lobe

+

46

Rete Testes

+

48

Seminal Vesicle

+

43

Testes

+

50

Interstit Cell, Adenoma

X

1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:25  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 5PPM TO CTL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	8
	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	4
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	0	0	1	1	1	2	2	2	0	0	0	1	1	1	1	1	2	0
	7	7	4	4	8	0	0	0	4	4	7	0	3	3	3	4	8	0
	7	8	1	2	4	2	3	4	8	9	3	0	7	8	9	0	3	1

\*TOTALS

#### Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Lymph Node	+	+																9
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Sarcoma																X		1
Thymus	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	45

#### Integumentary System

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	43
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Fibroma																		1

#### Musculoskeletal System

Bone, Femur	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

#### Nervous System

Brain, Brain Stem	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Brain, Cerebellum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Brain, Cerebrum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Astrocytoma Malignant																		1

#### Respiratory System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:25  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 5PPM TO CTL**

	DAY ON TEST	ANIMAL ID																		<b>*TOTALS</b>
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	0
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	8
	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	4
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Adenocarcinoma																				1
Carcinoma, Metastatic, Uncertain Primary Site																				1
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Squamous Cell Carcinoma																				1
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	44
<b>Special Senses System</b>																				
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Retrobulbar, Carcinoma																				1
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	43
Lacrimal Gland																				2
<b>Urinary System</b>																				
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Urethra	+																			2
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	43
<b>SYSTEMIC LESIONS</b>																				
Multiple Organ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Mesothelioma Malignant																				1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:25  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F3 100PPM TO CTL	DAY ON TEST																							
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		3	0	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	
		3	5	2	4	5	5	7	9	4	5	6	6	8	8	0	1	3	5	5	5	5	5	
		8	1	7	4	0	5	0	3	5	9	5	6	0	1	2	5	7	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
		0	0	1	2	2	2	2	3	3	4	4	4	4	7	9	9	9	9	9	9	0	0	
		8	1	8	0	0	1	2	7	6	8	0	0	4	3	8	3	4	8	8	8	9	9	0
		9	6	8	3	7	4	8	9	7	6	3	2	0	7	1	4	6	3	4	5	7	8	9

#### Alimentary System

Esophagus	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum		M					+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	A	A	A	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pancreas	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Acinar Cell, Adenoma																							X
Salivary Glands	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Glandular	A	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Tongue							+																

#### Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

#### Endocrine System

Adrenal Cortex	+	+	+	+	A	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+
Adenoma																							X

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:26  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F3 100PPM TO CTL	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	3	0	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7
		3	5	2	4	5	5	7	9	4	5	6	6	8	8	0	1	3	5	5	5	5
		8	1	7	4	0	5	0	3	5	9	5	6	0	1	2	5	7	1	1	1	2
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adrenal Medulla		+	+	+	+	A	+		+	+	+	+	+	+	A	+	+	+	+	+	+	+
Pheochromocytoma Benign																X			X		X	
Islets, Pancreatic		+	A	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																					X	
Carcinoma																						
Parathyroid Gland		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	M
Adenoma																						+
Pituitary Gland		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pars Distalis, Adenoma									X		X		X		X		X		X		X	X
Thyroid Gland		+	A	A	+	A	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>General Body System</b>																						
NONE																						
<b>Genital System</b>																						
Coagulating Gland		+	M	+	+	A	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+
Sarcoma, Metastatic, Uncertain Primary Site																						
Epididymis		+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+
Preputial Gland		+	M	M	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+
Carcinoma																						
Squamous Cell Carcinoma									X		X	X		X								
Prostate			M																			
Prostate, Dorsal Lobe		+	M	+	+	+	+		+	+	+	+	M	+	+	+	+	+	+	+	+	+
Sarcoma, Metastatic, Uncertain Primary Site																						

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:26  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F3 100PPM TO CTL	DAY ON TEST																				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		3	0	5	5	5	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7
		3	5	2	4	5	5	7	9	4	5	6	6	8	8	0	1	3	5	5	5
		8	1	7	4	0	5	0	3	5	9	5	6	0	1	2	5	7	1	1	1
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
		0	0	1	2	2	2	2	3	3	4	4	4	7	9	9	9	9	9	0	0
		8	1	8	0	0	1	2	7	6	8	0	0	4	3	8	3	4	8	8	9
		9	6	8	3	7	4	8	9	7	6	3	2	0	7	1	4	6	3	4	5
Prostate, Ventral Lobe	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																					
Rete Testes	+	M	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+
Seminal Vesicle	A	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Adenoma																					
Sarcoma																					
Sarcoma, Metastatic, Uncertain Primary Site																					
Testes	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<b>Hematopoietic System</b>																					
Bone Marrow	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node																					
Lymph Node, Mandibular	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node, Mesenteric	+	A	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Thymus	+	M	+	+	+	+	+	+	+	+	+	M	+	M	+	M	+	+	+	I	+
<b>Integumentary System</b>																					
Mammary Gland	+	A	+	+	A	I	+	M	I	+	I	+	+	+	+	+	I	+	+	+	+
Adenocarcinoma																		X			
Skin	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lipoma																					
Squamous Cell Carcinoma																		X			

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:26  
 First Dose M/F: NA / NA  
 Lab: NCTR

<b>CD Rat Male</b> <b>F3 100PPM TO CTL</b>	DAY ON TEST																					
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		3	0	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7
		3	5	2	4	5	5	7	9	4	5	6	6	8	8	0	1	3	5	5	5	5
		8	1	7	4	0	5	0	3	5	9	5	6	0	1	2	5	7	1	1	1	2
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
		0	0	1	2	2	2	2	3	3	4	4	4	4	7	9	9	9	9	9	9	9
		8	1	8	0	0	1	2	7	6	8	0	0	4	3	8	3	4	8	8	9	9
		9	6	8	3	7	4	8	9	7	6	3	2	0	7	1	4	6	3	4	5	7

**Musculoskeletal System**

Bone, Femur

+

**Nervous System**

Brain, Brain Stem

+

Brain, Cerebellum

A

Brain, Cerebrum

+

**Respiratory System**

Lung

+

Nose

A

Squamous Cell Carcinoma

X

Trachea

+

**Special Senses System**

Eye

A

+

Harderian Gland

A

+

Lacrimal Gland

+

+

Zymbal's Gland

+

Adenoma

X

+

**Urinary System**

Kidney

+

Urethra

+

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:26  
 First Dose M/F: NA / NA  
 Lab: NCTR

CD Rat Male F3 100PPM TO CTL	DAY ON TEST	Urinary Bladder																				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		3	0	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	7	7	7	7
		3	5	2	4	5	5	7	9	4	5	6	6	8	8	0	1	3	5	5	5	5
		8	1	7	4	0	5	0	3	5	9	5	6	0	1	2	5	7	1	1	1	2
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
		0	0	1	2	2	2	2	3	3	4	4	4	7	9	9	9	9	9	0	0	9
		8	1	8	0	0	1	2	7	6	8	0	0	4	3	8	3	4	8	8	9	0
		9	6	8	3	7	4	8	9	7	6	3	2	0	7	1	4	6	3	4	5	6

  

Urinary Bladder		SYSTEMIC LESIONS																			
Multiple Organ	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Histiocytic Sarcoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Leukemia Mononuclear	X																				

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:26  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 100PPM TO CTL**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	2
	6	6	6	8	5	5	5	7	8	8	8	8	4	4	4	4	8	1
	6	7	8	6	4	5	6	9	0	1	3	6	4	5	6	7	3	5

\*TOTALS

#### Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	38
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Intestine Small, Ileum	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	45
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	45
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Acinar Cell, Adenoma	X																	2
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46
Tongue																		1

#### Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49

#### Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Adenoma																		1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:26  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 100PPM TO CTL**

DAY ON TEST	ANIMAL ID																		*TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	6	6	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2
6	6	6	6	8	5	5	5	7	8	8	8	8	4	4	4	4	8	1	1
6	7	8	6	6	4	5	6	9	0	1	3	6	4	5	6	7	3	5	1

Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
Pheochromocytoma Benign														X					4
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Adenoma														X					2
Carcinoma															X				1
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Adenoma														X					1
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	48	
Pars Distalis, Adenoma	X			X	X	X	X			X			X	X				17	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46	

**General Body System**

NONE

**Genital System**

Coagulating Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Sarcoma, Metastatic, Uncertain Primary Site													X					1
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Carcinoma																		1
Squamous Cell Carcinoma													X					5
Prostate													+		+			6
Prostate, Dorsal Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47
Sarcoma, Metastatic, Uncertain Primary Site													X					1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
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### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:27  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 100PPM TO CTL**

	DAY ON TEST	ANIMAL ID																		*TOTALS		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6		
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48		
Adenoma																				X	1	
Rete Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	46		
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47		
Adenoma																				X	1	
Sarcoma																					X	1
Sarcoma, Metastatic, Uncertain Primary Site																					X	1
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48		
<b>Hematopoietic System</b>																						
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48		
Lymph Node	+	+																			18	
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48		
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47		
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48		
Thymus	+	I	+	+	+	+	I	+	+	+	+	+	+	I	+	+	+	+	+	41		
<b>Integumentary System</b>																						
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	41		
Adenocarcinoma																					1	
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48		
Lipoma																				X	1	
Squamous Cell Carcinoma																				X	3	

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:27  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Male**  
**F3 100PPM TO CTL**

DAY ON TEST	0 0																	
	7 7																	
ANIMAL ID	5 5																	
	4 4 4 4 5																	
	0 0																	
	1 1																	
	0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 2																	
	6 6 6 8 5 5 5 7 8 8 8 8 4 4 4 4 4 4 4 4 8 8 1																	
	6 7 8 6 4 5 6 9 0 1 3 6 4 5 6 7 3 5 1																	

\*TOTALS

**Musculoskeletal System**

Bone, Femur + 48

**Nervous System**

Brain, Brain Stem + 48

Brain, Cerebellum + 48

Brain, Cerebrum + 48

**Respiratory System**

Lung + 47

Nose + 49

Squamous Cell Carcinoma + 1

Trachea + 48

**Special Senses System**

Eye + 38

Harderian Gland + 38

Lacrimal Gland + 2

Zymbal's Gland + 1

Adenoma + 1

**Urinary System**

Kidney + 47

Urethra + 2

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
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**Route:** DOSED FEED  
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**Lab:** NCTR

**CD Rat Male**  
**F3 100PPM TO CTL**

DAY ON TEST	0 0																	
	7 7																	
ANIMAL ID	5 5																	
	4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6 6																	
Urinary Bladder	+ + + + + + + + + M + + + + + + + + + + + + + + +																	

\*TOTALS

47

### SYSTEMIC LESIONS

Multiple Organ

Histiocytic Sarcoma

Leukemia Mononuclear

+ +

49

X 1

1

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:27  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

| <b>CD Rat Male</b><br><b>F3 500PPM TO CTL</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |             | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|   |             | 5 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|   |             | 0 | 8 | 9 | 2 | 4 | 1 | 4 | 6 | 9 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                                     |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|   |             | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
|   |             | 1 | 5 | 8 | 9 | 0 | 8 | 2 | 4 | 3 | 5 | 7 | 3 | 3 | 8 | 8 | 8 | 0 | 0 | 1 | 1 | 1 | 0 | 9 | 9 | 1 | 5 |
|   |             | 7 | 4 | 9 | 0 | 9 | 5 | 3 | 7 | 6 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 8 | 9 | 0 | 1 | 2 | 3 | 7 | 3 | 2 |

#### Alimentary System

|                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Cecum          | + | + | + | A | + | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Colon          | + | + | + | A | A | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Rectum         | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Intestine Small, Duodenum       | + | + | A | A | A | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Small, Ileum          | A | + | + | A | A | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Small, Jejunum        | A | + | A | A | A | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Adenocarcinoma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Liver                           | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Carcinoma, Metastatic, Pancreas |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Hepatocellular Adenoma          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Pancreas                        | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Carcinoma                       |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Salivary Glands                 | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Carcinoma, Metastatic, Pancreas |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Stomach, Forestomach            | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Stomach, Glandular              | + | + | + | A | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart        | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:28  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Male<br>F3 500PPM TO CTL | DAY ON TEST | 0 |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------------|-------------|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|                                 |             | 0 5 5 5 5 6 6 6 6 6 6 6 7   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 |             | 5 0 2 3 5 0 2 2 2 3 4 7 1 5   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 |             | 0 8 9 2 4 1 4 6 9 8 1 9 3 1 1 1 1 1 1 1 1 1 1 1 2 2 3 3 3 4 4 4 4 4 4 4   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ANIMAL ID                       |             | 0   | 0 | 0 1 1 1 1 2 2 3 3 3 3 3 4 9 9 9 9 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 1 5 8 9 0 0 8 2 4 3 5 7 3 3 8 8 8 8 0 0 0 1 1 1 1 0 9 9 1 1 5 5 6 6 | 7 4 9 0 9 5 3 7 6 6 4 5 3 6 7 8 9 8 9 0 1 2 3 7 3 2 0 7 8 9 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                 |             | 0   | 0 | 0 1 1 1 1 2 2 3 3 3 3 3 4 9 9 9 9 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 1 5 8 9 0 0 8 2 4 3 5 7 3 3 8 8 8 8 0 0 0 1 1 1 1 0 9 9 1 1 5 5 6 6 | 7 4 9 0 9 5 3 7 6 6 4 5 3 6 7 8 9 8 9 0 1 2 3 7 3 2 0 7 8 9 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Endocrine System

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                   | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adrenal Medulla                  | + | A | + | A | M | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pheochromocytoma Benign          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Islets, Pancreatic               | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland                | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | M | + | + | + | + | M |
| Pituitary Gland                  | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma           |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Adenoma, Multiple |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Thyroid Gland                    | + | + | + | A | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C Cell, Adenoma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| C Cell, Carcinoma                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

General Body System

|                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tissue NOS              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   |   |   |
| Squamous Cell Carcinoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Genital System          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Coagulating Gland       | + | + | + | A | + | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Epididymis              | + | + | + | + | A | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + |
| Preputial Gland         | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |
| Squamous Cell Carcinoma |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Prostate                | + |   |   |   |   |   |   | A |   |   |   |   |   |   |   | + |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:28  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Male<br>F3 500PPM TO CTL                                 | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | 0           | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|   | 5           | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|   | 0           | 8 | 9 | 2 | 4 | 1 | 4 | 6 | 9 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 |
| CD Rat Male<br>F3 500PPM TO CTL                                 | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
|   |             | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 1 | 1 |
|   |             | 1 | 5 | 8 | 9 | 0 | 8 | 2 | 4 | 3 | 5 | 7 | 3 | 3 | 8 | 8 | 8 | 0 | 0 | 1 | 1 | 5 |
|   |             | 7 | 4 | 9 | 0 | 9 | 5 | 3 | 7 | 6 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |
| Prostate, Dorsal Lobe   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Prostate, Ventral Lobe  |             | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Rete Testes   |             | + | + | + | M | M | + | + | M | A | + | M | + | I | + | + | + | + | + | + | + | M |
| Seminal Vesicle   |             | + | + | + | A | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Testes  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <b>Hematopoietic System</b>                                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone Marrow   |             | + | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma, Metastatic, Pancreas                                 |             |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node  |             | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Squamous Cell Carcinoma,<br>Metastatic, Preputial Gland |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular  |             | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric  |             | M | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Spleen  |             | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma, Metastatic, Pancreas                                 |             |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thymus  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <b>Integumentary System</b>                                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mammary Gland   |             | I | I | + | + | I | + | + | A | I | A | + | + | + | + | + | I | + | + | + | + | I |
| Fibroadenoma  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibroma   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:28  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Male<br>F3 500PPM TO CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                 |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                 | ANIMAL ID   | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                                 |             | 5 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|                                 |             | 0 | 8 | 9 | 2 | 4 | 1 | 4 | 6 | 9 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 |
| Skin                            |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Basal Cell Adenoma              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Keratoacanthoma                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Neurofibrosarcoma               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Squamous Cell Papilloma         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Musculoskeletal System          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone                            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Chordoma                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone, Femur                     |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Carcinoma, Metastatic, Pancreas |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nervous System                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Brain Stem               |             | + | A | + | + | A | + |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Reticulosis Malignant           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Cerebellum               |             | + | A | + | A | A | + |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Reticulosis Malignant           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Cerebrum                 |             | + | A | + | A | A | + |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Reticulosis Malignant           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Respiratory System              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lung                            |             | + | + | + | A | + | + |   | + | A | A | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma, Metastatic, Pancreas |             |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
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**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:28  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Male<br>F3 500PPM TO CTL             | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | ANIMAL ID   | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|   |             | 5 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|   |             | 0 | 8 | 9 | 2 | 4 | 1 | 4 | 6 | 9 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 |
| Nose  |             | + | + | + | A | A | A | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + |
| Adventitia, Squamous Cell Carcinoma         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Trachea                                     |             | + | + | + | A | A | A |   | + | A | + | A | + | + | + | + | + | + | + | + | + | + |
| <b>Special Senses System</b>                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eye   |             | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adventitia, Squamous Cell Carcinoma         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Harderian Gland                             |             | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adenoma                                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Adventitia, Squamous Cell Carcinoma         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lacrimal Gland                              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Urinary System</b>                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Kidney                                      |             | + | + | + | A | + | + |   | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Adventitia, Carcinoma, Metastatic, Pancreas |             |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Transit Epithe, Papilloma                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Urethra                                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Urinary Bladder                             |             | + | + | + | A | + | + |   | + | A | + | + | + | + | M | + | + | + | + | + | + | + |
| <b>SYSTEMIC LESIONS</b>                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Multiple Organ                              |             | + | + | + | + | + | + |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Granulocytic                       |             |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mesothelioma Malignant                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:28  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 500PPM TO CTL**

| DAY ON TEST | 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 7 0   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 5 7   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 4 4 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 9     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 0     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| ANIMAL ID   | 0   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1           | 1   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 0           | 0   | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 6           | 6   | 8 | 8 | 8 | 8 | 5 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 8 | 8 | 8 | 9 | 1 |
| 1           | 9   | 2 | 4 | 5 | 3 | 1 | 2 | 8 | 9 | 0 | 1 | 2 | 7 | 8 | 9 | 0 | 1 | 9 |

\*TOTALS

**Alimentary System**

|                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Cecum          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Large, Colon          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Large, Rectum         | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 38 |
| Intestine Small, Duodenum       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Small, Ileum          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Small, Jejunum        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 41 |
| Adenocarcinoma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Liver                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Carcinoma, Metastatic, Pancreas |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Hepatocellular Adenoma          |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 1  |
| Pancreas                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Carcinoma                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Salivary Glands                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Carcinoma, Metastatic, Pancreas |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Stomach, Forestomach            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Stomach, Glandular              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:28  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 500PPM TO CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 7 |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 9 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
|             | 6 | 6 | 8 | 8 | 8 | 5 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 8 | 8 | 8 | 9 | 9 | 1 |
|             | 1 | 9 | 2 | 4 | 5 | 3 | 1 | 2 | 8 | 9 | 0 | 1 | 2 | 7 | 8 | 9 | 0 | 1 | 9 |

\*TOTALS

#### Endocrine System

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adrenal Medulla                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Pheochromocytoma Benign          |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | 2  |
| Islets, Pancreatic               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Parathyroid Gland                | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | 43 |
| Pituitary Gland                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Pars Distalis, Adenoma           |   |   |   |   | X | X | X |   |   | X | X | X |   |   |   |   |   |   | 14 |
| Pars Distalis, Adenoma, Multiple |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | 1  |
| Thyroid Gland                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| C Cell, Adenoma                  |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | 1  |
| C Cell, Carcinoma                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

#### General Body System

|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Tissue NOS              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| Squamous Cell Carcinoma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

#### Genital System

|                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Coagulating Gland       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Epididymis              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Preputial Gland         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | 47 |
| Squamous Cell Carcinoma |   |   |   |   |   | X |   |   |   | X |   |   |   |   |   |   |   |   | 3  |
| Prostate                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | 4  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:29  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 500PPM TO CTL**

| DAY ON TEST   | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | *TOTALS |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
|   | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |         |
|   | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7  |         |
|   | 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5  |         |
|   | 4         | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5  |         |
| Prostate, Dorsal Lobe   | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |         |
| Adenocarcinoma  |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 1  |         |
| Prostate, Ventral Lobe  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |         |
| Adenoma   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 1  |         |
| Rete Testes   | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |         |
| Seminal Vesicle   | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |         |
| Testes  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |         |
| <b>Hematopoietic System</b>                                     |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |         |
| Bone Marrow   | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |         |
| Carcinoma, Metastatic, Pancreas                                 |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1       |
| Lymph Node  | +         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | +  | 12      |
| Lumbar, Squamous Cell Carcinoma,<br>Metastatic, Preputial Gland |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1       |
| Lymph Node, Mandibular  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |         |
| Lymph Node, Mesenteric  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |         |
| Spleen  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |         |
| Carcinoma, Metastatic, Pancreas                                 |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1       |
| Thymus  | +         | + | + | + | + | + | + | M | + | + | M | + | + | + | I | + | + | 44 |         |
| <b>Integumentary System</b>                                     |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |         |
| Mammary Gland   | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |         |
| Fibroadenoma  | X         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 2       |
| Fibroma   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 2       |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:29  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 500PPM TO CTL**

| DAY ON TEST                     | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | *TOTALS |
|---------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
|                                 | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |         |
| 7                               | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 0  |         |
| 5                               | 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 7  |         |
| 4                               | 4         | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 9  |         |
| 0                               | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |         |
| 1                               | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0  |         |
| 0                               | 0         | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0  |         |
| 6                               | 6         | 8 | 8 | 8 | 5 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 5 | 8 | 8 | 8 | 9 | 1  |         |
| 1                               | 9         | 2 | 4 | 5 | 3 | 1 | 2 | 8 | 9 | 0 | 1 | 2 | 7 | 8 | 9 | 0 | 1 | 9  |         |
| Skin                            | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |         |
| Basal Cell Adenoma              | X         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| Keratoacanthoma                 |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| Neurofibrosarcoma               |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| Squamous Cell Papilloma         | X         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| <b>Musculoskeletal System</b>   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |         |
| Bone                            |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| Chordoma                        |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| Bone, Femur                     | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |         |
| Skeletal Muscle                 |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| Carcinoma, Metastatic, Pancreas |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| <b>Nervous System</b>           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |         |
| Brain, Brain Stem               | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |         |
| Reticulosis Malignant           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| Brain, Cerebellum               | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |         |
| Reticulosis Malignant           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| Brain, Cerebrum                 | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |         |
| Reticulosis Malignant           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |
| <b>Respiratory System</b>       |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |         |
| Lung                            | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |         |
| Carcinoma, Metastatic, Pancreas |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1       |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:29  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Male**  
**F3 500PPM TO CTL**

| DAY ON TEST                                 | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | *TOTALS |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
|   | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |         |
| 7   | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 0  |         |
| 5   | 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 7  |         |
| 4   | 4         | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 9  |         |
| 0   | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |         |
| 1   | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0  |         |
| 0   | 0         | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0  |         |
| 6   | 6         | 8 | 8 | 8 | 5 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 5 | 8 | 8 | 8 | 9 | 1  |         |
| 1   | 9         | 2 | 4 | 5 | 3 | 1 | 2 | 8 | 9 | 0 | 1 | 2 | 7 | 8 | 9 | 0 | 1 | 9  |         |
| Nose  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |         |
| Adventitia, Squamous Cell Carcinoma         |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |         |
| Trachea                                     | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 |         |
| <b>Special Senses System</b>                |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |         |
| Eye   | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 39 |         |
| Adventitia, Squamous Cell Carcinoma         |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |         |
| Harderian Gland                             | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 39 |         |
| Adenoma                                     |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |         |
| Adventitia, Squamous Cell Carcinoma         |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |         |
| Lacrimal Gland                              |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |         |
| <b>Urinary System</b>                       |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |         |
| Kidney                                      | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |         |
| Adventitia, Carcinoma, Metastatic, Pancreas |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |         |
| Transit Epithe, Papilloma                   |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |         |
| Urethra                                     |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |         |
| Urinary Bladder                             | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |         |
| <b>SYSTEMIC LESIONS</b>                     |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |         |
| Multiple Organ                              | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |         |
| Leukemia Granulocytic                       |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |         |
| Mesothelioma Malignant                      |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |         |

\*\*\*END OF MALE DATA\*\*\*

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:29  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 0 PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                           |             | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |   |
|                           |             | 2 | 3 | 6 | 2 | 3 | 1 | 1 | 8 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 5 | 5 | 6 | 9 | 9 | 9 | 1 | 1 | 2 | 3 | 3 |   |
|                           |             | 4 | 1 | 7 | 5 | 6 | 4 | 4 | 3 | 7 | 2 | 5 | 6 | 6 | 6 | 8 | 6 | 8 | 4 | 6 | 9 | 8 | 8 | 8 | 0 | 5 | 7 | 3 | 1 |   |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
| ANIMAL ID                 |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                           |             | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |   |
|                           |             | 4 | 5 | 6 | 9 | 0 | 2 | 2 | 2 | 9 | 2 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 0 | 9 | 2 | 7 | 8 | 8 | 1 | 2 | 2 | 5 | 8 | 9 |
|                           |             | 0 | 8 | 6 | 8 | 1 | 7 | 8 | 8 | 4 | 3 | 2 | 6 | 7 | 8 | 5 | 3 | 7 | 0 | 8 | 5 | 8 | 0 | 3 | 7 | 0 | 2 | 9 | 3 | 1 |

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Rectum   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Intestine Small, Duodenum | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + |  |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Cholangioma               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

#### Endocrine System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:29  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 0 PPM**

| DAY ON TEST | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 2         | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|             | 2         | 3 | 6 | 2 | 3 | 1 | 1 | 8 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 5 | 5 | 6 |
|             | 4         | 1 | 7 | 5 | 6 | 4 | 4 | 3 | 7 | 2 | 5 | 6 | 6 | 6 | 8 | 6 | 8 | 4 | 6 | 9 |
|             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0         | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 4 |
|             | 4         | 5 | 6 | 9 | 0 | 2 | 2 | 2 | 9 | 2 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 0 | 9 | 2 |
|             | 0         | 8 | 6 | 8 | 1 | 7 | 8 | 8 | 4 | 3 | 2 | 6 | 7 | 8 | 5 | 3 | 7 | 0 | 8 | 5 |
|             | 8         | 6 | 8 | 1 | 7 | 8 | 8 | 4 | 3 | 2 | 6 | 7 | 8 | 5 | 3 | 7 | 0 | 8 | 5 | 3 |
|             | 1         | 7 | 5 | 6 | 4 | 4 | 3 | 7 | 2 | 5 | 6 | 6 | 6 | 8 | 6 | 8 | 4 | 6 | 9 | 8 |
|             | 7         | 8 | 4 | 3 | 2 | 6 | 7 | 8 | 5 | 3 | 2 | 6 | 7 | 8 | 5 | 3 | 7 | 0 | 8 | 5 |
|             | 7         | 8 | 4 | 3 | 2 | 6 | 7 | 8 | 5 | 3 | 2 | 6 | 7 | 8 | 5 | 3 | 7 | 0 | 8 | 5 |
|             | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |

|                        |   |   |
|------------------------|---|---|
| Adenoma                | X | X |
| Adrenal Medulla        | + | + |
| Islets, Pancreatic     | + | + |
| Adenoma                | + | + |
| Parathyroid Gland      | M | + |
| Pituitary Gland        | + | + |
| Pars Distalis, Adenoma | X | X |
| Thyroid Gland          | + | + |
| C Cell, Adenoma        | + | + |

### General Body System

NONE

### Genital System

|                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland             | + | + | + | + | + | M | M | + | + | + | + | + | + | + | + | + | + | + | M | + |
| Squamous Cell Papilloma    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Ovary                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Oviduct                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Uterus                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Polyp Stromal              |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |
| Sarcoma Stromal            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Vagina                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Granular Cell Tumor Benign |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Sarcoma Stromal            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:30  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 0 PPM | DAY ON TEST | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|---------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                           |             | 2         | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |   |
|                           |             | 2         | 3 | 6 | 2 | 3 | 1 | 1 | 8 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 5 | 5 | 6 | 9 | 9 | 9 | 1 | 1 | 1 | 2 | 3 | 3 | 3 |
|                           |             | 4         | 1 | 7 | 5 | 6 | 4 | 4 | 3 | 7 | 2 | 5 | 6 | 6 | 8 | 6 | 8 | 4 | 6 | 9 | 8 | 8 | 8 | 0 | 5 | 7 | 3 | 1 | 7 | 7 | 7 |
|                           |             | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

#### Hematopoietic System

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Lymph Node             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + |  |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Spleen                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Thymus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + |  |
| Thymoma Malignant      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |

#### Integumentary System

|                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Mammary Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |   |  |
| Adenocarcinoma           |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |  |
| Adenocarcinoma, Multiple |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |  |
| Adenoma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Fibroadenoma             |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Fibroadenoma, Multiple   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |  |
| Skin                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |  |
| Fibroma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |  |
| Lipoma                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |  |
| Sarcoma                  |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Squamous Cell Carcinoma  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |

#### Musculoskeletal System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:30  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 0 PPM         | DAY ON TEST | P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                   |             | Test Compound: Endocrine disruptor (Genistein)                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                   |             | CAS Number: 446-72-0  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                   |             | 0   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                   |             | 2   | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Bone, Femur                       |             | 2   | 3 | 6 | 2 | 3 | 1 | 1 | 8 | 0 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 5 | 5 | 6 | 9 |
| Nervous System                    |             | 4   | 1 | 7 | 5 | 6 | 4 | 4 | 3 | 7 | 2 | 5 | 6 | 6 | 8 | 6 | 8 | 4 | 6 | 9 | 8 |
| Brain, Brain Stem                 |             | 0   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brain, Cerebellum                 |             | 0   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brain, Cerebrum                   |             | 0   | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 |
| Granular Cell Tumor Benign        |             | 4   | 5 | 6 | 9 | 0 | 2 | 2 | 2 | 9 | 2 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 0 | 9 | 2 |
| Respiratory System                |             | 0   | 8 | 6 | 8 | 1 | 7 | 8 | 8 | 4 | 3 | 2 | 6 | 7 | 8 | 5 | 3 | 7 | 0 | 8 | 5 |
| Lung                              |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Nose                              |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Trachea                           |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Special Senses System             |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Eye                               |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Harderian Gland                   |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Urinary System                    |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Kidney                            |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Transitional Epithelial Carcinoma |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Urinary Bladder                   |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| SYSTEMIC LESIONS                  |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Multiple Organ                    |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Granulocytic             |             | X   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
Test Type: MULTIGEN CHRONIC  
Route: DOSED FEED  
Species/Strain: Rat/CD

## P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
Time Report Requested: 14:25:30  
First Dose M/F: NA / NA  
Lab: NCTR

**CD Rat Female**  
**F1 0 PPM**

| DAY ON TEST | Lymphoma Malignant |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 0                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 2                  | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|             | 2                  | 3 | 6 | 2 | 3 | 1 | 1 | 8 | 0 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 5 | 5 | 6 | 9 |
|             | 4                  | 1 | 7 | 5 | 6 | 4 | 4 | 3 | 7 | 2 | 5 | 6 | 6 | 8 | 6 | 8 | 4 | 6 | 9 | 8 |
| ANIMAL ID   | 0                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0                  | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 3 |
|             | 4                  | 5 | 6 | 9 | 0 | 2 | 2 | 2 | 9 | 2 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 0 | 9 | 2 |
|             | 0                  | 8 | 6 | 8 | 1 | 7 | 8 | 8 | 4 | 3 | 2 | 6 | 7 | 8 | 5 | 3 | 7 | 0 | 8 | 5 |

X

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:30  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

| CD Rat Female<br>F1 0 PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|                           |             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |  |
|                           |             | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |  |
|                           |             | 8 | 8 | 8 | 9 | 0 | 0 | 0 | 3 | 3 | 3 | 4 | 4 | 5 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 2 | 2 |  |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| ANIMAL ID                 |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|                           |             | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 |  |
|                           |             | 2 | 5 | 5 | 5 | 5 | 1 | 1 | 1 | 4 | 4 | 9 | 1 | 2 | 5 | 4 | 5 | 1 | 2 | 3 | 6 | 7 | 1 | 1 |  |
|                           |             | 7 | 2 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 0 | 0 | 3 | 9 | 6 | 6 | 9 | 0 | 6 | 8 | 0 | 7 | 0 | 1 |  |
| *TOTALS                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

**Alimentary System**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 30 |   |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |   |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |   |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Cholangioma               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |   |
| Mesentery                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |   |
| Lipoma                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1 |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |

**Endocrine System**

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:30  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 0 PPM | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                           |             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                           |             | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
|                           |             | 8 | 8 | 8 | 9 | 0 | 0 | 0 | 3 | 3 | 3 | 4 | 4 | 5 | 6 | 6 | 8 | 8 | 8 | 8 | 2 |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                           |             | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 9 | 9 |
|                           |             | 2 | 5 | 5 | 5 | 5 | 1 | 1 | 1 | 4 | 4 | 9 | 1 | 2 | 5 | 4 | 5 | 1 | 2 | 3 | 6 |
|                           |             | 7 | 2 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 0 | 0 | 3 | 9 | 6 | 6 | 9 | 0 | 6 | 8 | 0 |

\*TOTALS

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Adenoma                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2  |
| Adrenal Medulla        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |    |
| Islets, Pancreatic     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |    |
| Adenoma                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1  |
| Parathyroid Gland      | M | + | M | + | + | M | M | + | + | + | + | + | + | + | + | + | + | + | + | M | +  | 46 |
| Pituitary Gland        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 54 |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X  | 38 |
| Thyroid Gland          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 54 |
| C Cell, Adenoma        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 2  |

**General Body System**

NONE

**Genital System**

|                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Clitoral Gland             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |   |
| Squamous Cell Papilloma    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1 |
| Ovary                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Oviduct                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Uterus                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Polyp Stromal              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 4 |
| Sarcoma Stromal            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1 |
| Vagina                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |   |
| Granular Cell Tumor Benign |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1 |
| Sarcoma Stromal            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:30  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 0 PPM                       | DAY ON TEST | 0     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|   |             | 7     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |             | 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |             | 8 8 8 9 0 0 0 3 3 3 4 4 5 6 6 8 8 8 8 8 8 2 2 2 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |             | 0     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ANIMAL ID                                       |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 5 5 5 6 6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 5 5 5 1 1 1 4 4 9 1 2 5 4 5 1 2 3 6 7 0 3 9 6 |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 2 9 0 1 2 3 6 7 0 0 3 9 6 6 9 0 6 8 0 7 0 1 1 |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\*TOTALS

### Hematopoietic System

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Bone Marrow            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |    |
| Lymph Node             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | +  | 11 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |    |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |    |
| Spleen                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |    |
| Thymus                 | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 50 |    |
| Thymoma Malignant      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |    |

### Integumentary System

|                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |
| Adenocarcinoma           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 7  |
| Adenocarcinoma, Multiple |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Adenoma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Fibroadenoma             | X | X | X |   | X | X |   | X |   | X |   | X |   | X |   | X |   | X |   | X |   | 19 |
| Fibroadenoma, Multiple   |   |   |   |   | X |   | X |   | X |   | X |   | X |   | X |   | X |   | X |   | X | 13 |
| Skin                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 54 |
| Fibroma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lipoma                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Sarcoma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Squamous Cell Carcinoma  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

### Musculoskeletal System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:31  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 0 PPM         | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | *TOTALS |    |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|----|
|                                   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |    |
|                                   | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |    |
|                                   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |    |
|                                   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |    |
|                                   |             | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 9 | 9       |    |
|                                   |             | 2 | 5 | 5 | 5 | 1 | 1 | 1 | 4 | 4 | 9 | 1 | 2 | 5 | 4 | 5 | 1 | 2 | 3 | 6 | 7 | 1       | 1  |
|                                   |             | 7 | 2 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 0 | 0 | 3 | 9 | 6 | 6 | 9 | 0 | 6 | 8 | 0 | 7       | 0  |
| Bone, Femur                       |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 54 |
| <b>Nervous System</b>             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |
| Brain, Brain Stem                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 54 |
| Brain, Cerebellum                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 53 |
| Brain, Cerebrum                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 54 |
| Granular Cell Tumor Benign        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |         | 1  |
| <b>Respiratory System</b>         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |
| Lung                              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 54 |
| Nose                              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 54 |
| Trachea                           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 54 |
| <b>Special Senses System</b>      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |
| Eye                               |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 32 |
| Harderian Gland                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 30 |
| <b>Urinary System</b>             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |
| Kidney                            |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 54 |
| Transitional Epithelial Carcinoma |             |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 1  |
| Urinary Bladder                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 54 |
| <b>SYSTEMIC LESIONS</b>           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |
| Multiple Organ                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +       | 54 |
| Leukemia Granulocytic             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 1  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:31  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female**  
**F1 0 PPM**

| DAY ON TEST |                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
| ANIMAL ID   | 7              | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |
|             | 3              | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
|             | 8              | 8 | 8 | 9 | 0 | 0 | 0 | 3 | 3 | 3 | 4 | 4 | 5 | 6 | 6 | 8 | 8 | 8 | 8 | 2 | 2 |
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5              | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 9 | 9 |
|             | 2              | 5 | 5 | 5 | 1 | 1 | 1 | 4 | 4 | 9 | 1 | 2 | 5 | 4 | 5 | 1 | 2 | 3 | 6 | 7 | 1 |
|             | 7              | 2 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 0 | 0 | 3 | 9 | 6 | 6 | 9 | 0 | 6 | 8 | 0 | 7 |
|             | <b>*TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |

Lymphoma Malignant

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92

Test Type: MULTIGEN CHRONIC

Route: DOSED FEED

Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014

Time Report Requested: 14:25:31

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female<br>F1 5PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                          |             | 1 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                          |             | 1 | 2 | 5 | 6 | 6 | 7 | 9 | 0 | 2 | 2 | 2 | 3 | 4 | 5 | 7 | 8 | 8 | 0 | 1 | 1 | 1 | 3 | 3 | 3 |
|                          |             | 1 | 8 | 1 | 0 | 7 | 8 | 7 | 5 | 0 | 5 | 8 | 1 | 0 | 6 | 0 | 1 | 6 | 8 | 0 | 0 | 6 | 0 | 4 | 6 |
| ANIMAL ID                | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                          | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                          | 0           | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
|                          | 1           | 3 | 5 | 6 | 7 | 9 | 1 | 2 | 3 | 5 | 4 | 6 | 8 | 0 | 3 | 5 | 6 | 9 | 9 | 0 | 2 | 4 | 9 | 8 | 8 |
| Alimentary System        | 8           | 4 | 3 | 3 | 8 | 4 | 1 | 0 | 7 | 0 | 4 | 8 | 0 | 6 | 4 | 4 | 0 | 5 | 7 | 6 | 1 | 4 | 9 | 6 | 5 |
|                          | 4           | 3 | 3 | 3 | 8 | 4 | 1 | 0 | 7 | 0 | 4 | 8 | 0 | 6 | 4 | 4 | 0 | 5 | 7 | 6 | 1 | 4 | 9 | 6 | 5 |
|                          | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                          | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fibrous Histiocytoma, Metastatic, Skin |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mesentery                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Sarcoma                                |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreas                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

**Cardiovascular System**

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

**Endocrine System**

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:31  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 5PPM | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                          |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                          |             | 1 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                          |             | 1 | 2 | 5 | 6 | 6 | 7 | 9 | 0 | 2 | 2 | 2 | 3 | 4 | 5 | 7 | 8 | 8 | 0 | 1 | 1 | 1 |
|                          |             | 1 | 8 | 1 | 0 | 7 | 8 | 7 | 5 | 0 | 5 | 8 | 1 | 0 | 6 | 0 | 1 | 6 | 8 | 0 | 0 | 6 |
| ANIMAL ID                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                          |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                          |             | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
|                          |             | 1 | 3 | 5 | 6 | 7 | 9 | 1 | 2 | 3 | 5 | 4 | 6 | 8 | 0 | 3 | 5 | 6 | 9 | 9 | 0 | 2 |
|                          |             | 8 | 4 | 3 | 3 | 8 | 4 | 1 | 0 | 7 | 0 | 4 | 8 | 0 | 6 | 4 | 4 | 0 | 5 | 7 | 6 | 1 |
| Adrenal Cortex           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| X                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adrenal Medulla          |             | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pheochromocytoma Benign  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic       |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Carcinoma                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Parathyroid Gland        |             | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thyroid Gland            |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| General Body System      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| NONE                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Genital System           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clitoral Gland           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + |
| Ovary                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Oviduct                  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Uterus                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Polyp Stromal            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Vagina                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic System     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:31  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 5PPM                              | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 1 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
|   |             | 1 | 2 | 5 | 6 | 6 | 7 | 9 | 0 | 2 | 2 | 2 | 3 | 4 | 5 | 7 | 8 | 8 | 0 | 1 | 1 |
|   |             | 1 | 8 | 1 | 0 | 7 | 8 | 7 | 5 | 0 | 5 | 8 | 1 | 0 | 6 | 0 | 1 | 6 | 8 | 0 | 0 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
|   |             | 1 | 3 | 5 | 6 | 7 | 9 | 1 | 2 | 3 | 5 | 4 | 6 | 8 | 0 | 3 | 5 | 6 | 9 | 9 | 0 |
|   |             | 8 | 4 | 3 | 3 | 8 | 4 | 1 | 0 | 7 | 0 | 4 | 8 | 0 | 6 | 4 | 4 | 0 | 5 | 7 | 6 |
| Bone Marrow   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Lymph Node  |             |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Fibrous Histiocytoma, Metastatic,<br>Skin |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Fibrous Histiocytoma, Metastatic,<br>Skin      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular                                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric                                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thymus  |             | + | + | + | + | + | + | M | + | + | + | + | + | + | + | M | M | + | M | M | + |
| <b>Integumentary System</b>                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mammary Gland   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Adenocarcinoma, Multiple                              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Adenoma   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibroadenoma  |             |   | X |   |   |   | X |   | X | X | X | X | X | X | X |   | X | X | X |   |   |
| Fibroadenoma, Multiple                                |             |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   | X |
| Fibroma   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Skin  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibrous Histiocytoma                                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |
| Keratoacanthoma                                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Musculoskeletal System</b>                         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:32  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 5PPM     | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                              |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                              |             | 1 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
|                              |             | 1 | 2 | 5 | 6 | 6 | 7 | 9 | 0 | 2 | 2 | 2 | 3 | 4 | 5 | 7 | 8 | 8 | 0 | 1 | 1 |
|                              |             | 1 | 8 | 1 | 0 | 7 | 8 | 7 | 5 | 0 | 5 | 8 | 1 | 0 | 6 | 0 | 1 | 6 | 8 | 0 | 0 |
|                              |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                              |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                              |             | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
|                              |             | 1 | 3 | 5 | 6 | 7 | 9 | 1 | 2 | 3 | 5 | 4 | 6 | 8 | 0 | 3 | 5 | 6 | 9 | 9 | 0 |
|                              |             | 8 | 4 | 3 | 3 | 8 | 4 | 1 | 0 | 7 | 0 | 4 | 8 | 0 | 6 | 4 | 4 | 0 | 5 | 7 | 6 |
| Bone, Femur                  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Skeletal Muscle              |             |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Nervous System</b>        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Brain Stem            |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebellum            |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Astrocytoma Malignant        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Cerebrum              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <b>Respiratory System</b>    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lung                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Alveolar/Bronchiolar Adenoma |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Nose                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Trachea                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <b>Special Senses System</b> |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eye                          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Harderian Gland              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lacrimal Gland               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| <b>Urinary System</b>        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Kidney                       |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Urinary Bladder              |             | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <b>SYSTEMIC LESIONS</b>      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:32  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

| CD Rat Female<br>F1 5PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|--------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|                          |             | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |  |
|                          |             | 1 | 2 | 5 | 6 | 6 | 7 | 9 | 0 | 2 | 2 | 2 | 3 | 4 | 5 | 7 | 8 | 8 | 0 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |  |
|                          |             | 1 | 8 | 1 | 0 | 7 | 8 | 7 | 5 | 0 | 5 | 8 | 1 | 0 | 6 | 0 | 1 | 6 | 8 | 0 | 0 | 6 | 0 | 4 | 6 | 7 | 7 | 7 | 8 | 9 |  |
|                          |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
| ANIMAL ID                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|                          |             | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 6 |   |  |
|                          |             | 1 | 3 | 5 | 6 | 7 | 9 | 1 | 2 | 3 | 5 | 4 | 6 | 8 | 0 | 3 | 5 | 6 | 9 | 9 | 0 | 2 | 4 | 9 | 8 | 8 | 8 | 3 | 4 | 4 |  |
|                          |             | 8 | 4 | 3 | 3 | 8 | 4 | 1 | 0 | 7 | 0 | 4 | 8 | 0 | 6 | 4 | 4 | 0 | 5 | 7 | 6 | 1 | 4 | 9 | 6 | 5 | 7 | 2 | 3 | 7 |  |
| Multiple Organ           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Histiocytic Sarcoma      |             |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:32  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 5PPM | DAY ON TEST | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------------|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|                          |             | 7   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |             | 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |             | 9 9 9 0 2 3 3 3 4 4 4 4 4 4 5 5 5 2 2 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |             | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ANIMAL ID                |             | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |             | 6 6 6 6 6 6 6 6 7 7 7 7 7 7 7 7 7 9 9 9   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |             | 0 0 1 0 5 4 6 6 4 0 0 2 2 4 5 5 5 0 0 0   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                          |             | 8 9 0 6 2 2 3 4 0 1 2 1 2 4 7 5 5 7 8 9   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>*TOTALS</b>           |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

#### Alimentary System

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 32 |
| Intestine Small, Duodenum              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Jejunum               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 1  |
| Liver                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibrous Histiocytoma, Metastatic, Skin |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 1  |
| Mesentery                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Sarcoma                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Pancreas                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Glandular                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Endocrine System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:32  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 5PPM**

|                             | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | <b>*TOTALS</b> |
|-----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------------|
|                             |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |                |
| ANIMAL ID                   | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7  | <b>*TOTALS</b> |
|                             | 3           | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5  |                |
|                             | 9           | 9 | 9 | 0 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 2 | 2  |                |
|                             | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |                |
|                             | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |                |
| Adrenal Cortex              | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Adenoma                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |
| Adrenal Medulla             | +           | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |                |
| Pheochromocytoma Benign     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |
| Islets, Pancreatic          | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Adenoma                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | X              |
| Carcinoma                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | X              |
| Parathyroid Gland           | +           | + | + | + | + | + | + | + | M | + | M | + | + | + | + | + | + | + | 46 |                |
| Pituitary Gland             | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Pars Distalis, Adenoma      | X           | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 40 |                |
| Thyroid Gland               | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| <b>General Body System</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                |
| NONE                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                |
| <b>Genital System</b>       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                |
| Clitoral Gland              | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |                |
| Ovary                       | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Oviduct                     | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Uterus                      | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Polyp Stromal               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |
| Vagina                      | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| <b>Hematopoietic System</b> |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:32  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 5PPM**

| DAY ON TEST   | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | *TOTALS |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
|   | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
| 7   | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7       |
| 3   | 3         | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5       |
| 9   | 9         | 9 | 9 | 0 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 2 | 2       |
| 0   | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
| 0   | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
| 6   | 6         | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9       |
| 0   | 0         | 1 | 0 | 5 | 4 | 6 | 6 | 4 | 0 | 1 | 2 | 2 | 2 | 4 | 5 | 5 | 0 | 0 | 0       |
| 8   | 9         | 0 | 6 | 2 | 2 | 3 | 4 | 0 | 1 | 2 | 1 | 2 | 4 | 7 | 8 | 7 | 8 | 9 | 9       |
| Bone Marrow   | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Lymph Node  |           | + | + |   |   |   |   |   |   | + |   |   |   |   | + | M |   |   | 10      |
| Pancreatic, Fibrous Histiocytoma, Metastatic,<br>Skin |           |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | 1       |
| Renal, Fibrous Histiocytoma, Metastatic,<br>Skin      |           |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | 1       |
| Lymph Node, Mandibular                                | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Lymph Node, Mesenteric                                | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Spleen  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Thymus  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43      |
| <b>Integumentary System</b>                           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Mammary Gland   | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Adenocarcinoma  |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| Adenocarcinoma, Multiple                              |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2       |
| Adenoma   |           |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | 1       |
| Fibroadenoma  |           |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 17      |
| Fibroadenoma, Multiple                                |           |   |   |   | X |   |   |   |   |   |   |   | X |   | X |   |   |   | 10      |
| Fibroma   |           |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   | 1       |
| Skin  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Fibrous Histiocytoma                                  |           |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | 1       |
| Keratoacanthoma                                       |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| <b>Musculoskeletal System</b>                         |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:32  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 5PPM**

| DAY ON TEST                  | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | *TOTALS |
|------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
|                              | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
| 7                            | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7       |
| 3                            | 3         | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5       |
| 9                            | 9         | 9 | 9 | 0 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 2 | 2 | 2       |
| 0                            | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
| 0                            | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
| 6                            | 6         | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9       |
| 0                            | 0         | 1 | 0 | 5 | 4 | 6 | 6 | 4 | 0 | 1 | 2 | 2 | 2 | 4 | 5 | 5 | 0 | 0 | 0       |
| 8                            | 9         | 0 | 6 | 2 | 2 | 3 | 4 | 0 | 1 | 2 | 1 | 2 | 4 | 7 | 8 | 7 | 8 | 9 | 9       |
| Bone, Femur                  | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Skeletal Muscle              |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| <b>Nervous System</b>        |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Brain, Brain Stem            | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Brain, Cerebellum            | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Astrocytoma Malignant        |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| X                            |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Brain, Cerebrum              | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| <b>Respiratory System</b>    |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Lung                         | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Alveolar/Bronchiolar Adenoma |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| Nose                         | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Trachea                      | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| <b>Special Senses System</b> |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Eye                          | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 32      |
| Harderian Gland              | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 34      |
| Lacrimal Gland               |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| <b>Urinary System</b>        |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Kidney                       | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Urinary Bladder              | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49      |
| <b>SYSTEMIC LESIONS</b>      |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:33  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female**  
**F1 5PPM**

| DAY ON TEST         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
|                     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |
| ANIMAL ID           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7  |
|                     | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5  |
|                     | 9 | 9 | 9 | 0 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 2 | 2 | 2  |
| Multiple Organ      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Histiocytic Sarcoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| <b>*TOTALS</b>      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
Test Type: MULTIGEN CHRONIC  
Route: DOSED FEED  
Species/Strain: Rat/CD

## P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
Time Report Requested: 14:25:33  
First Dose M/F: NA / NA  
Lab: NCTR

| CD Rat Female<br>F1 100PPM | DAY ON TEST | Day On Test |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                            |             | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                            |             | 2           | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 |
|                            |             | 6           | 0 | 6 | 8 | 2 | 3 | 4 | 6 | 0 | 0 | 2 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 9 | 1 | 2 |
|                            |             | 8           | 1 | 5 | 6 | 0 | 4 | 5 | 5 | 3 | 4 | 6 | 5 | 8 | 8 | 3 | 4 | 7 | 7 | 8 | 1 | 1 |
|                            | ANIMAL ID   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                            |             | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                            |             | 0           | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 |
|                            |             | 5           | 9 | 1 | 2 | 3 | 3 | 4 | 7 | 1 | 2 | 4 | 7 | 7 | 8 | 9 | 1 | 0 | 0 | 0 | 3 | 5 |
|                            |             | 1           | 1 | 8 | 4 | 0 | 6 | 9 | 5 | 8 | 1 | 1 | 3 | 8 | 1 | 4 | 1 | 4 | 5 | 3 | 2 | 0 |

## Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                 | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum | + | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | A | + | A | + |
| Intestine Small, Jejunum  | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A | + |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Mesentery                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

## Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

## Endocrine System

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:33  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 100PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 2 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
|             | 6 | 0 | 6 | 8 | 2 | 3 | 4 | 6 | 0 | 0 | 2 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 6 | 9 | 1 | 2 | 3 | 3 |
|             | 8 | 1 | 5 | 6 | 0 | 4 | 5 | 5 | 3 | 4 | 6 | 5 | 8 | 8 | 3 | 4 | 7 | 7 | 8 | 8 | 1 | 1 | 1 | 6 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 |
|             | 5 | 9 | 1 | 2 | 3 | 3 | 4 | 7 | 1 | 2 | 4 | 7 | 7 | 8 | 9 | 1 | 0 | 0 | 0 | 3 | 7 | 1 | 2 | 4 |
|             | 1 | 1 | 8 | 4 | 0 | 6 | 9 | 5 | 8 | 1 | 1 | 3 | 8 | 1 | 4 | 1 | 4 | 5 | 3 | 2 | 0 | 8 | 4 | 5 |

Pheochromocytoma Complex

X

|                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Islets, Pancreatic       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Adenoma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Parathyroid Gland        | + | + | + | + | + | + | M | + | M | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + |  |
| Pituitary Gland          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Pars Distalis, Adenoma   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Pars Distalis, Carcinoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Thyroid Gland            | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| C Cell, Adenoma          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

**General Body System**

NONE

**Genital System**

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Clitoral Gland                 | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |     |
| Carcinoma                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X   |
| Squamous Cell Papilloma        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X   |
| Ovary                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |     |
| Granulosa Cell Tumor Malignant |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X   |
| Sarcoma Stromal                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
| Oviduct                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |     |
| Uterus                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |     |
| Adenocarcinoma                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X   |
| Polyp Stromal                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X X |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:33  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 100PPM | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                            |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                  | 2           | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 |
|                            | 6           | 0 | 6 | 8 | 2 | 3 | 4 | 6 | 0 | 0 | 2 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 6 | 9 | 1 |
|                            | 8           | 1 | 5 | 6 | 0 | 4 | 5 | 5 | 3 | 4 | 6 | 5 | 8 | 8 | 3 | 4 | 7 | 7 | 8 | 1 | 1 |
| Sarcoma Stromal            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Vagina                     | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Sarcoma Stromal            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hematopoietic System       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone Marrow                | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |
| Lymph Node, Mandibular     | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric     | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen                     | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thymus                     | +           | + | + | + | M | + | M | + | + | + | + | M | + | + | + | + | + | + | + | + | + |
| Integumentary System       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mammary Gland              | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma             |             |   |   |   |   |   |   | X |   | X |   | X |   |   |   |   |   |   |   |   | X |
| Adenocarcinoma, Multiple   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibroadenoma               |             |   |   |   |   |   | X |   | X |   | X |   | X |   | X |   | X |   | X |   | X |
| Fibroadenoma, Multiple     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Skin                       | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lipoma                     |             |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |
| Musculoskeletal System     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone, Femur                | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:33  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 100PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                            |             | 2 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                            |             | 6 | 0 | 6 | 8 | 2 | 3 | 4 | 6 | 0 | 0 | 2 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 6 | 9 | 1 | 2 | 3 | 3 | 3 | 3 | 3 |
|                            |             | 8 | 1 | 5 | 6 | 0 | 4 | 5 | 5 | 3 | 4 | 6 | 5 | 8 | 8 | 3 | 4 | 7 | 7 | 8 | 8 | 1 | 1 | 1 | 1 | 6 | 7 | 7 |
|                            |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Hemangiosarcoma

Sarcoma

**Nervous System**

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebrum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Granular Cell Tumor Malignant

Meningioma Malignant

**Respiratory System**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Lung                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Alveolar/Bronchiolar Adenoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Nose                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Squamous Cell Carcinoma      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Trachea                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |

**Special Senses System**

|                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Eye             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Harderian Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lacrimal Gland  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Urinary System**

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Urinary Bladder | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:34  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

| CD Rat Female<br>F1 100PPM | DAY ON TEST | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|----------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                            |             | 2         | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                            |             | 6         | 0 | 6 | 8 | 2 | 3 | 4 | 6 | 0 | 0 | 2 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 6 | 9 | 1 | 2 | 3 | 3 | 3 | 3 | 3 |
|                            |             | 8         | 1 | 5 | 6 | 0 | 4 | 5 | 5 | 3 | 4 | 6 | 5 | 8 | 8 | 3 | 4 | 7 | 7 | 8 | 8 | 1 | 1 | 1 | 1 | 6 | 7 | 7 |
|                            |             | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Urinary Bladder            |             | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| <b>SYSTEMIC LESIONS</b>    |             | M         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Multiple Organ             |             | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:34  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 100PPM**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
|             | 9 | 9 | 3 | 3 | 4 | 4 | 4 | 5 | 7 | 7 | 8 | 9 | 9 | 9 | 9 | 9 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 6 | 8 | 9 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 9 |
|             | 4 | 4 | 4 | 6 | 6 | 0 | 2 | 6 | 2 | 1 | 1 | 8 | 0 | 0 | 3 | 3 | 6 | 1 |
|             | 4 | 5 | 3 | 6 | 5 | 3 | 0 | 2 | 1 | 4 | 2 | 2 | 6 | 9 | 0 | 1 | 7 | 2 |
|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |

\*TOTALS

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 30 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesentery                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Endocrine System

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:34  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 100PPM**

| DAY ON TEST | 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 7 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 5 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 9 9 3 3 4 4 4 4 5 7 7 8 9 9 9 9 9 9 9 0 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| ANIMAL ID   | 0   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5   | 5 | 6 | 6 | 6 | 7 | 7 | 6 | 8 | 9 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 9 |
|             | 4   | 4 | 4 | 6 | 6 | 0 | 2 | 6 | 2 | 1 | 1 | 8 | 0 | 0 | 3 | 3 | 6 | 6 |
|             | 4   | 5 | 3 | 6 | 5 | 3 | 0 | 2 | 1 | 4 | 2 | 2 | 6 | 9 | 0 | 1 | 7 | 2 |

\*TOTALS

|                          |    |
|--------------------------|----|
| Pheochromocytoma Complex | 1  |
| Islets, Pancreatic       | 50 |
| Adenoma                  | 2  |
| Parathyroid Gland        | 46 |
| Pituitary Gland          | 50 |
| Pars Distalis, Adenoma   | 33 |
| Pars Distalis, Carcinoma | 1  |
| Thyroid Gland            | 49 |
| C Cell, Adenoma          | 2  |

#### General Body System

NONE

#### Genital System

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Carcinoma                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Squamous Cell Papilloma        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Ovary                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Granulosa Cell Tumor Malignant |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | 2  |
| Sarcoma Stromal                |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Oviduct                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Uterus                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Polyp Stromal                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**  
**Test Compound:** Endocrine disruptor (Genistein)  
**CAS Number:** 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:34  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 100PPM**

| DAY ON TEST                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | <b>*TOTALS</b> |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------------|
|                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |                |
| ANIMAL ID                     | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |                |
| Sarcoma Stromal               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |
| Vagina                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Sarcoma Stromal               | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |
| <b>Hematopoietic System</b>   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                |
| Bone Marrow                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Lymph Node                    |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 12             |
| Lymph Node, Mandibular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Lymph Node, Mesenteric        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Spleen                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Thymus                        | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | M | M | 43 |                |
| <b>Integumentary System</b>   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                |
| Mammary Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Adenocarcinoma                |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 6              |
| Adenocarcinoma, Multiple      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2              |
| Fibroadenoma                  |   |   | X |   |   |   | X |   |   |   | X |   | X |   | X |   |   |    | 20             |
| Fibroadenoma, Multiple        | X | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |    | 8              |
| Skin                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Lipoma                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |
| <b>Musculoskeletal System</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                |
| Bone, Femur                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Skeletal Muscle               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

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**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:34  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female**  
**F1 100PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
|             | 9 | 9 | 3 | 3 | 4 | 4 | 4 | 5 | 7 | 7 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 6 | 8 | 9 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
|             | 4 | 4 | 4 | 6 | 6 | 0 | 2 | 6 | 2 | 1 | 1 | 8 | 0 | 0 | 3 | 3 | 6 | 6 | 1 |
|             | 4 | 5 | 3 | 6 | 5 | 3 | 0 | 2 | 1 | 4 | 2 | 2 | 6 | 9 | 0 | 1 | 7 | 2 | 3 |

\*TOTALS

Hemangiosarcoma

X 1

Sarcoma

X 1

#### Nervous System

|                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain, Brain Stem             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Brain, Cerebellum             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Brain, Cerebrum               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Granular Cell Tumor Malignant |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Meningioma Malignant          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

#### Respiratory System

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Adenoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | 1  |
| Nose                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Squamous Cell Carcinoma      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Trachea                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Special Senses System

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 31 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 30 |
| Lacrimal Gland  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

#### Urinary System

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:34  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female  
F1 100PPM**

| DAY ON TEST             | Urinary Bladder |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | <b>*TOTALS</b> |
|-------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------------|
|                         | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |                |
| ANIMAL ID               | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |                |
|                         | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0              |
|                         | 5               | 5 | 6 | 6 | 6 | 7 | 7 | 6 | 8 | 9 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 9  | 9              |
|                         | 4               | 4 | 4 | 6 | 6 | 0 | 2 | 6 | 2 | 1 | 1 | 8 | 0 | 0 | 3 | 3 | 6 | 6  | 1              |
|                         | 4               | 5 | 3 | 6 | 5 | 3 | 0 | 2 | 1 | 4 | 2 | 2 | 6 | 9 | 0 | 1 | 7 | 2  | 3              |
| Urinary Bladder         | +               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |                |
| <b>SYSTEMIC LESIONS</b> | +               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Multiple Organ          | +               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |    |                |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:34  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                            |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                            |             | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
|                            |             | 3 | 4 | 5 | 0 | 1 | 5 | 6 | 6 | 9 | 0 | 1 | 1 | 2 | 3 | 3 | 4 | 6 | 6 | 6 | 7 |
|                            |             | 0 | 5 | 9 | 8 | 2 | 0 | 5 | 8 | 8 | 5 | 8 | 8 | 6 | 0 | 2 | 4 | 0 | 0 | 8 | 5 |
|                            |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                            |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                            |             | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
|                            |             | 5 | 6 | 6 | 9 | 2 | 5 | 7 | 8 | 1 | 1 | 3 | 3 | 3 | 6 | 7 | 8 | 1 | 1 | 2 | 3 |
|                            |             | 7 | 0 | 2 | 3 | 5 | 2 | 4 | 7 | 0 | 9 | 3 | 6 | 8 | 1 | 0 | 4 | 5 | 6 | 4 | 7 |

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum    | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A |
| Intestine Small, Jejunum  | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Mesentery                 |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreas                  | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

#### Endocrine System

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Adrenal Medulla | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:35  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM   | DAY ON TEST | P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                              |             | Test Compound: Endocrine disruptor (Genistein)                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                              |             | CAS Number: 446-72-0  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                              |             | 0   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                              |             | 3   | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 |
| Islets, Pancreatic Carcinoma |             | +   | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland            |             | +   | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland              |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma       |             | X   | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Thyroid Gland                |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C Cell, Adenoma              |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <b>General Body System</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| NONE                         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Genital System</b>        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clitoral Gland               |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ovary                        |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Granulosa Cell Tumor Benign  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Oviduct                      |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Uterus                       |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Polyp Stromal                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vagina                       |             | +   | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <b>Hematopoietic System</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone Marrow                  |             | +   | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:35  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM    | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                               |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                               |             | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 |
|                               |             | 3 | 4 | 5 | 0 | 1 | 5 | 6 | 6 | 9 | 0 | 1 | 1 | 2 | 3 | 3 | 4 | 6 | 6 | 7 | 7 |
|                               |             | 0 | 5 | 9 | 8 | 2 | 0 | 5 | 8 | 8 | 5 | 8 | 8 | 6 | 0 | 2 | 4 | 0 | 0 | 8 | 9 |
|                               |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                               |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                               |             | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
|                               |             | 5 | 6 | 6 | 9 | 2 | 5 | 7 | 8 | 1 | 1 | 3 | 3 | 3 | 6 | 7 | 8 | 1 | 1 | 2 | 3 |
|                               |             | 7 | 0 | 2 | 3 | 5 | 2 | 4 | 7 | 0 | 9 | 3 | 6 | 8 | 1 | 0 | 4 | 5 | 6 | 7 | 3 |
| Lymph Node, Mandibular        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Lymph Node, Mesenteric        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |   |
| Spleen                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Thymus                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M |   |
| <b>Integumentary System</b>   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Mammary Gland                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Adenocarcinoma                |             |   |   |   |   | X |   |   |   | X | X | X |   |   |   |   | X | X |   |   |   |
| Adenocarcinoma, Multiple      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Adenoma                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Fibroadenoma                  |             |   |   |   |   |   | X | X | X |   |   |   |   |   |   |   |   |   |   | X |   |
| Fibroadenoma, Multiple        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Skin                          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| <b>Musculoskeletal System</b> |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Bone, Femur                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| <b>Nervous System</b>         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Brain, Brain Stem             |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Brain, Cerebellum             |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Granular Cell Tumor Benign    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Brain, Cerebrum               |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Granular Cell Tumor Benign    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Granular Cell Tumor Nos       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:35  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                            |             | 3 | 3 | 3 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |   |
|                            |             | 3 | 4 | 5 | 0 | 1 | 5 | 6 | 6 | 9 | 0 | 1 | 1 | 2 | 3 | 3 | 4 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 9 | 2 | 3 | 3 |   |
|                            |             | 0 | 5 | 9 | 8 | 2 | 0 | 5 | 8 | 8 | 5 | 8 | 8 | 6 | 0 | 2 | 4 | 0 | 0 | 8 | 5 | 8 | 9 | 8 | 8 | 4 | 6 | 7 |   |
|                            |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                            |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                            |             | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 4 | 4 |
|                            |             | 5 | 6 | 6 | 9 | 2 | 5 | 7 | 8 | 1 | 1 | 3 | 3 | 3 | 3 | 6 | 7 | 8 | 1 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 3 | 0 |   |
|                            |             | 7 | 0 | 2 | 3 | 5 | 2 | 4 | 7 | 0 | 9 | 3 | 6 | 8 | 1 | 0 | 4 | 5 | 6 | 4 | 7 | 2 | 0 | 4 | 5 | 6 | 9 | 1 | 2 |

#### Respiratory System

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung                                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Squamous Cell Carcinoma, Metastatic, Nose |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Nose                                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Squamous Cell Carcinoma                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |
| Trachea                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |

#### Special Senses System

|   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Eye                                       | + | + |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Harderian Gland                           |   |   | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Squamous Cell Carcinoma, Metastatic, Nose |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |

#### Urinary System

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|
| Kidney          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |
| Nephroblastoma  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | X |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |

#### SYSTEMIC LESIONS

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|
| Multiple Organ       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |
| Leukemia Mononuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | X |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:35  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM   | DAY ON TEST | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|------------------------------|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|
|                              |             | 7   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|                              |             | 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|                              |             | 8 8 8 8 8 3 3 4 5 8 8 9 9 9 9 0 0 0 1     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|                              |             | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
| ANIMAL ID                    |             | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|                              |             | 5 5 5 5 5 6 6 6 7 8 8 8 8 8 8 8 8 8 8 8 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|                              |             | 2 3 4 4 4 4 4 6 8 4 1 1 0 2 3 3 4 6 1     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|                              |             | 9 0 6 8 9 1 7 9 5 0 1 5 9 2 3 3 1 6 2     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|                              |             | *TOTALS                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
| <b>Alimentary System</b>     |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
| Esophagus                    |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |
| Intestine Large, Cecum       |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |
| Intestine Large, Colon       |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |
| Intestine Large, Rectum      |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 24 |
| Intestine Small, Duodenum    |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 |
| Intestine Small, Ileum       |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 45 |
| Intestine Small, Jejunum     |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 45 |
| Liver                        |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |
| Mesentery                    |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  |
| Pancreas                     |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 |
| Salivary Glands              |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |
| Stomach, Forestomach         |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |
| Stomach, Glandular           |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |
| <b>Cardiovascular System</b> |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
| Blood Vessel                 |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |
| Heart                        |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |
| <b>Endocrine System</b>      |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
| Adrenal Cortex               |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |
| Adenoma                      |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |
| Adrenal Medulla              |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:35  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
|                             |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |
|                             | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |
| Islets, Pancreatic          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Carcinoma                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Parathyroid Gland           |             | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 |
| Pituitary Gland             |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Pars Distalis, Adenoma      |             | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 46 |
| Thyroid Gland               |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| C Cell, Adenoma             |             |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   | 3  |
| <b>General Body System</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| NONE                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| <b>Genital System</b>       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Clitoral Gland              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Ovary                       |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Granulosa Cell Tumor Benign |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Oviduct                     |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Uterus                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Polyp Stromal               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Vagina                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| <b>Hematopoietic System</b> |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Bone Marrow                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lymph Node                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:36  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female**  
**F1 500PPM**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
|             | 8 | 8 | 8 | 8 | 8 | 3 | 3 | 4 | 5 | 8 | 8 | 9 | 9 | 9 | 9 | 0 | 0 | 1 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
|             | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 6 | 8 | 4 | 1 | 1 | 0 | 2 | 3 | 3 | 4 | 6 |
|             | 9 | 0 | 6 | 8 | 9 | 1 | 7 | 9 | 5 | 0 | 1 | 5 | 9 | 2 | 3 | 1 | 6 | 2 |

\*TOTALS

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Spleen                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Thymus                 | M | + | + | M | + | + | + | + | + | + | + | + | M | + | + | M | + | 44 |

#### Integumentary System

|                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenocarcinoma           |   |   |   | X |   | X |   | X |   |   |   |   |   |   |   |   |   | 10 |
| Adenocarcinoma, Multiple |   |   |   |   | X |   |   |   | X |   |   |   |   |   |   |   |   | 3  |
| Adenoma                  |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   | 5  |
| Fibroadenoma             |   |   |   |   |   | X |   |   | X |   | X |   |   |   |   |   |   | 8  |
| Fibroadenoma, Multiple   |   | X |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   | 4  |
| Skin                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

#### Musculoskeletal System

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

#### Nervous System

|                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain, Brain Stem          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Brain, Cerebellum          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Granular Cell Tumor Benign |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Brain, Cerebrum            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Granular Cell Tumor Benign |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Granular Cell Tumor Nos    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:36  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM | DAY ON TEST | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|----------------------------|-------------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                            |             | 7       | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                            |             | 3       | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
|                            |             | 8       | 8 | 8 | 8 | 8 | 3 | 3 | 4 | 5 | 8 | 8 | 9 | 9 | 9 | 0 | 0 | 1 |
|                            |             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                            |             | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                            |             | 5       | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
|                            |             | 2       | 3 | 4 | 4 | 4 | 4 | 6 | 8 | 4 | 1 | 1 | 0 | 2 | 3 | 3 | 4 | 1 |
|                            |             | 9       | 0 | 6 | 8 | 9 | 1 | 7 | 9 | 5 | 0 | 1 | 5 | 9 | 2 | 3 | 1 | 6 |
|                            |             | *TOTALS |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

#### Respiratory System

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung                                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Squamous Cell Carcinoma, Metastatic, Nose |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Nose                                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Squamous Cell Carcinoma                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Trachea                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

#### Special Senses System

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye                                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 |
| Harderian Gland                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 25 |
| Squamous Cell Carcinoma, Metastatic, Nose |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lacrimal Gland                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

#### Urinary System

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Nephroblastoma  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

#### SYSTEMIC LESIONS

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leukemia Mononuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:36  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 5PPM/CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                              |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                              |             | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |
|                              |             | 2 | 3 | 5 | 4 | 8 | 2 | 2 | 2 | 3 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 0 | 2 | 3 | 3 |   |
|                              |             | 5 | 9 | 1 | 3 | 1 | 0 | 5 | 7 | 4 | 8 | 7 | 9 | 3 | 3 | 8 | 2 | 9 | 4 | 7 | 7 |   |
|                              |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                              |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                              |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                              |             | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 |   |
|                              |             | 5 | 0 | 1 | 4 | 9 | 3 | 5 | 5 | 6 | 0 | 2 | 3 | 3 | 4 | 6 | 7 | 0 | 3 | 9 | 9 | 4 |
|                              |             | 6 | 2 | 4 | 8 | 5 | 5 | 3 | 5 | 7 | 9 | 1 | 1 | 9 | 4 | 2 | 2 | 4 | 3 | 6 | 7 | 8 |

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum    | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum    | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum  | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Mesentery                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Tongue                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

#### Cardiovascular System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Schwannoma Nos |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

#### Endocrine System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:36  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 5PPM/CTL   | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|                                |             | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |  |
|                                |             | 2 | 3 | 5 | 4 | 8 | 2 | 2 | 2 | 3 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 0 | 2 | 3 | 3 | 3 |   |  |
|                                |             | 5 | 9 | 1 | 3 | 1 | 0 | 5 | 7 | 4 | 8 | 7 | 9 | 3 | 3 | 8 | 2 | 9 | 4 | 7 | 7 | 8 |   |  |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
| ANIMAL ID                      |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|                                |             | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 |   |  |
|                                |             | 5 | 0 | 1 | 4 | 9 | 3 | 5 | 5 | 6 | 0 | 2 | 3 | 3 | 4 | 6 | 7 | 0 | 3 | 9 | 9 | 4 |   |  |
|                                |             | 6 | 2 | 4 | 8 | 5 | 5 | 3 | 5 | 7 | 9 | 1 | 1 | 9 | 4 | 2 | 2 | 4 | 3 | 6 | 7 | 8 |   |  |
|                                |             | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| <b>Carcinoma</b>               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Adrenal Medulla                |             | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Pheochromocytoma Benign        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Islets, Pancreatic             |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Adenoma                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Parathyroid Gland              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + |   |  |
| Pituitary Gland                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + |  |
| Pars Distalis, Adenoma         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Thyroid Gland                  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| C Cell, Adenoma                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |  |
| <b>General Body System</b>     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| NONE                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| <b>Genital System</b>          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Clitoral Gland                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M |   |  |
| Squamous Cell Papilloma        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Ovary                          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Granulosa Cell Tumor Benign    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Granulosa Cell Tumor Malignant |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Oviduct                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Uterus                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Polyp Stromal                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Sarcoma Stromal                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:36  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 5PPM/CTL  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                               |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                               | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Vagina                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| <b>Hematopoietic System</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone Marrow                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node                    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | M |   |   |   |
| Lymph Node, Mandibular        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thymus                        |             | + | + | + | + | + | + | + | + | M | + | + | M | + | + | + | + | + | + | + | + | + | + |
| <b>Integumentary System</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mammary Gland                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma                |             |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibroadenoma                  |             |   | X |   |   | X | X | X | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |
| Fibroadenoma, Multiple        |             |   |   | X |   |   |   | X |   |   |   |   |   |   |   |   | X | X |   |   |   | X |   |
| Skin                          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibroma                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Keratoacanthoma               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Musculoskeletal System</b> |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone, Femur                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Bone, Mandible                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Squamous Cell Carcinoma       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Skeletal Muscle               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:37  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 5PPM/CTL                         | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |  |
|  |             | 2 | 3 | 5 | 4 | 8 | 2 | 2 | 2 | 3 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 0 | 2 | 3 | 3 |  |
|  |             | 5 | 9 | 1 | 3 | 1 | 0 | 5 | 7 | 4 | 8 | 7 | 9 | 3 | 3 | 8 | 2 | 9 | 4 | 7 | 7 |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| ANIMAL ID  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 |  |
|  |             | 5 | 0 | 1 | 4 | 9 | 3 | 5 | 5 | 6 | 0 | 2 | 3 | 3 | 4 | 6 | 7 | 0 | 3 | 9 | 9 |  |
|  |             | 6 | 2 | 4 | 8 | 5 | 5 | 3 | 5 | 7 | 9 | 1 | 1 | 9 | 4 | 2 | 2 | 4 | 3 | 6 | 7 |  |
|  |             | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Granulosa Cell Tumor Malignant, Metastatic,<br>Ovary |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| <b>Nervous System</b>                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Brain, Brain Stem                                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Brain, Cerebellum                                    |             | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + |  |
| Brain, Cerebrum                                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| <b>Respiratory System</b>                            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Lung   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Alveolar/Bronchiolar Adenoma                         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Nose   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Trachea  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| <b>Special Senses System</b>                         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Ear  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Squamous Cell Papilloma                              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Eye  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Harderian Gland                                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Lacrimal Gland                                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| <b>Urinary System</b>                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Kidney   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Urinary Bladder                                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:37  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

| CD Rat Female<br>F1 5PPM/CTL | DAY ON TEST | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                              |             | 3         | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                              |             | 2         | 3 | 5 | 4 | 8 | 2 | 2 | 2 | 3 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 0 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 |
|                              |             | 5         | 9 | 1 | 3 | 1 | 0 | 5 | 7 | 4 | 8 | 7 | 9 | 3 | 3 | 8 | 2 | 9 | 4 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 0 |
|                              |             | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                              |             |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**SYSTEMIC LESIONS**

Multiple Organ  
 Histiocytic Sarcoma

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:37  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 5PPM/CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                              |             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                              |             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 |
|                              |             | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 9 | 9 | 9 | 0 | 2 | 2 |
|                              |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                    |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                              |             | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 9 |
|                              |             | 5 | 5 | 5 | 7 | 7 | 9 | 0 | 0 | 5 | 5 | 5 | 6 | 1 | 1 | 3 | 7 | 7 | 1 |
|                              |             | 3 | 4 | 0 | 1 | 2 | 1 | 8 | 9 | 3 | 4 | 5 | 1 | 5 | 6 | 7 | 2 | 3 | 4 |
|                              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\*TOTALS

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 33 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesentery                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | 49 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Tongue                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

#### Cardiovascular System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Schwannoma Nos |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 1  |

#### Endocrine System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:37  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 5PPM/CTL   | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | *TOTALS |   |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|---|
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |   |
|                                | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |   |
| Carcinoma                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |   |
| Adrenal Medulla                |             | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |   | 48      |   |
| Pheochromocytoma Benign        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |         | 2 |
| Islets, Pancreatic             |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 50      |   |
| Adenoma                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |         | 2 |
| Parathyroid Gland              |             | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 47      |   |
| Pituitary Gland                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 49      |   |
| Pars Distalis, Adenoma         |             | X |   | X |   | X | X | X | X | X | X | X | X | X | X | X | X | X |   | 32      |   |
| Thyroid Gland                  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 50      |   |
| C Cell, Adenoma                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |         | 1 |
| <b>General Body System</b>     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |   |
| NONE                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |   |
| <b>Genital System</b>          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |   |
| Clitoral Gland                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 49      |   |
| Squamous Cell Papilloma        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |         | 1 |
| Ovary                          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 50      |   |
| Granulosa Cell Tumor Benign    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 1 |
| Granulosa Cell Tumor Malignant |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 1 |
| Oviduct                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 50      |   |
| Uterus                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 50      |   |
| Polyp Stromal                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 1 |
| Sarcoma Stromal                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 1 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:37  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 5PPM/CTL**

| DAY ON TEST                   | 0 |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------------|---|---------|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|                               | 7 |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ANIMAL ID                     | 4 |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | 2 2 3 3 3 3 4 4 5 5 5 5 5 9 9 9 0 2 2 2 |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vagina                        | + + + + + + + + + + + + + + + + M       | + + + + | 49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Hematopoietic System</b>   |   |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bone Marrow                   | + + + + + + + + + + + + + + + + + +     | 50      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node                    | + + + + + + + + + + + + + + + + + +     | 9       |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mandibular        | + + + + + + + + + + + + + + + + + +     | 50      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mesenteric        | + + + + + + + + + + + + + + + + + +     | 50      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spleen                        | + + + + + + + + + + + + + + + + + +     | 50      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thymus                        | + + + + + + + + + + + + + + + + + +     | 47      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Integumentary System</b>   |   |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mammary Gland                 | + + + + + + + + + + + + + + + + + +     | 50      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adenocarcinoma                |   | 3       |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibroadenoma                  | X X X X X X X X X X X X X X X X         | 21      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibroadenoma, Multiple        | X X X X X X X X X X X X X X X X         | 9       |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skin                          | + + + + + + + + + + + + + + + + + +     | 50      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibroma                       |   | 1       |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Keratoacanthoma               | X                                       | 1       |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Musculoskeletal System</b> |   |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bone, Femur                   | + + + + + + + + + + + + + + + + + +     | 50      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bone, Mandible                |   | 1       |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Squamous Cell Carcinoma       |   | 1       |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skeletal Muscle               |   | 1       |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\*TOTALS

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:37  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female**  
**F1 5PPM/CTL**

| DAY ON TEST | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>*TOTALS</b> |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
|             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
| 7           | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |                |
| 4           | 4         | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 |                |
| 2           | 2         | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 9 | 9 | 9 | 0 | 2 | 2 | 2 |                |
| 0           | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
| 0           | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
| 6           | 6         | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |                |
| 5           | 5         | 5 | 7 | 7 | 9 | 0 | 0 | 5 | 5 | 5 | 6 | 1 | 1 | 3 | 7 | 7 | 7 | 1 |                |
| 3           | 4         | 0 | 1 | 2 | 1 | 8 | 9 | 3 | 4 | 5 | 1 | 5 | 6 | 7 | 2 | 3 | 4 | 5 |                |

Granulosa Cell Tumor Malignant, Metastatic,  
Ovary

1

#### Nervous System

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Brain, Cerebrum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Respiratory System

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Adenoma |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | 1  |
| Nose                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Trachea                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Special Senses System

|                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Ear                     |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Squamous Cell Papilloma |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Eye                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 33 |
| Harderian Gland         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 33 |
| Lacrimal Gland          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

#### Urinary System

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 49 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:37  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female**  
**F1 5PPM/CTL**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 |
|             | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 9 | 9 | 9 | 0 | 2 | 2 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |
|             | 5 | 5 | 5 | 7 | 7 | 9 | 0 | 0 | 5 | 5 | 5 | 6 | 1 | 1 | 3 | 7 | 7 | 1 |
|             | 3 | 4 | 0 | 1 | 2 | 1 | 8 | 9 | 3 | 4 | 5 | 1 | 5 | 6 | 7 | 2 | 3 | 4 |

\*TOTALS

**SYSTEMIC LESIONS**

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Histiocytic Sarcoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

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CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
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 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 100PPM/CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                                |             | 1 | 2 | 3 | 7 | 1 | 3 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 0 | 0 | 2 | 3 | 3 | 3 | 3 | 3 |
|                                |             | 0 | 3 | 8 | 7 | 9 | 2 | 4 | 8 | 0 | 0 | 3 | 3 | 8 | 3 | 9 | 0 | 2 | 3 | 7 | 7 | 8 |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 5 |
|                                |             | 9 | 9 | 3 | 9 | 3 | 7 | 9 | 0 | 2 | 3 | 5 | 5 | 8 | 8 | 0 | 2 | 5 | 0 | 0 | 9 | 5 |
|                                |             | 4 | 7 | 7 | 2 | 4 | 4 | 9 | 7 | 7 | 0 | 3 | 7 | 2 | 9 | 5 | 5 | 0 | 0 | 1 | 2 | 7 |
|                                |             | 7 | 8 | 9 | 0 | 3 | 7 | 2 | 9 | 5 | 5 | 0 | 0 | 1 | 2 | 7 | 8 | 4 | 5 | 1 | 6 | 4 |
|                                |             | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |  |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Colon    | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Rectum   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Intestine Small           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |  |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Small, Ileum    | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + |  |
| Intestine Small, Jejunum  | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + |  |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |

#### Cardiovascular System

|                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Endocrine System |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adrenal Cortex   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma          |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:38  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 100PPM/CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                                |             | 1 | 2 | 3 | 7 | 1 | 3 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 0 | 0 | 2 | 3 | 3 | 3 | 3 | 3 |
|                                |             | 0 | 3 | 8 | 7 | 9 | 2 | 4 | 8 | 0 | 0 | 3 | 3 | 8 | 3 | 9 | 0 | 2 | 3 | 7 | 7 | 8 |
| ANIMAL ID                      |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 5 |
|                                |             | 9 | 9 | 3 | 9 | 3 | 7 | 9 | 0 | 2 | 3 | 5 | 5 | 8 | 8 | 0 | 2 | 5 | 0 | 9 | 9 | 5 |
|                                |             | 4 | 7 | 7 | 2 | 4 | 4 | 9 | 7 | 7 | 0 | 3 | 7 | 2 | 9 | 5 | 5 | 0 | 0 | 1 | 2 | 7 |
| Adrenal Medulla                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Islets, Pancreatic             |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Carcinoma                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Parathyroid Gland              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |
| Pituitary Gland                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | M |
| Pars Distalis, Adenoma         |             | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Thyroid Gland                  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C Cell, Adenoma                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>General Body System</b>     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| NONE                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Genital System</b>          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clitoral Gland                 |             | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Squamous Cell Papilloma        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Ovary                          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |
| Sarcoma Stromal                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Oviduct                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |
| Uterus                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |
| Polyp Stromal                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vagina                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |
| Granular Cell Tumor Benign     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:38  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

| <b>CD Rat Female</b><br><b>F1 100PPM/CTL</b> | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |             | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |
|  |             | 1 | 2 | 3 | 7 | 1 | 3 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 0 | 0 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 |   |
|  |             | 0 | 3 | 8 | 7 | 9 | 2 | 4 | 8 | 0 | 0 | 3 | 3 | 8 | 3 | 9 | 0 | 2 | 3 | 7 | 7 | 7 | 8 | 9 |   |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |             | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 5 | 6 |   |
|  |             | 9 | 9 | 3 | 9 | 3 | 7 | 9 | 0 | 2 | 3 | 5 | 5 | 8 | 8 | 0 | 2 | 5 | 0 | 0 | 9 | 9 | 5 | 5 | 3 |
|  |             | 4 | 7 | 7 | 2 | 4 | 4 | 9 | 7 | 7 | 0 | 3 | 7 | 2 | 9 | 5 | 5 | 0 | 0 | 1 | 2 | 7 | 8 | 4 | 5 |

**Hematopoietic System**

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thymus                 | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | M | + | + | + | + | + |

**Integumentary System**

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma         |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |
| Adenoma                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Fibroadenoma           | X | X | X |   |   |   |   | X |   |   |   |   |   |   | X | X | X |   |   |   |   |   | X | X |
| Fibroadenoma, Multiple |   | X |   | X | X | X |   |   | X |   | X | X |   |   |   | X |   | X | X |   |   |   |   |   |
| Skin                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibroma                |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |
| Lipoma                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |

**Musculoskeletal System**

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Lipoma          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |

**Nervous System**

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:38  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

| CD Rat Female<br>F1 100PPM/CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                                |             | 1 | 2 | 3 | 7 | 1 | 3 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 0 | 0 | 2 | 3 | 3 | 3 | 3 | 4 |
|                                |             | 0 | 3 | 8 | 7 | 9 | 2 | 4 | 8 | 0 | 0 | 3 | 3 | 8 | 3 | 9 | 0 | 2 | 3 | 7 | 7 | 5 |
| ANIMAL ID                      |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 5 | 5 |
|                                |             | 9 | 9 | 3 | 9 | 3 | 7 | 9 | 0 | 2 | 3 | 5 | 5 | 8 | 8 | 0 | 2 | 5 | 0 | 9 | 9 | 5 |
|                                |             | 4 | 7 | 7 | 2 | 4 | 4 | 9 | 7 | 7 | 0 | 3 | 7 | 2 | 9 | 5 | 5 | 0 | 0 | 1 | 2 | 7 |
| Brain, Brain Stem              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Brain, Cerebellum              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Brain, Cerebrum                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Astrocytoma Malignant          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Respiratory System</b>      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lung                           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Nose                           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Trachea                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| <b>Special Senses System</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eye                            |             |   | + |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + | + | + | + |   |
| Harderian Gland                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + | + | + | + |   |
| <b>Urinary System</b>          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Kidney                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Renal Tubule, Adenoma          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Urinary Bladder                |             | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |   |
| <b>SYSTEMIC LESIONS</b>        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Multiple Organ                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:38  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 100PPM/CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |  |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|--|
|                                |             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7       |  |
|                                |             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5       |  |
|                                |             | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 3       |  |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |  |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |  |
| ANIMAL ID                      |             | 7 | 7 | 7 | 7 | 7 | 9 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 8       |  |
|                                |             | 4 | 4 | 4 | 5 | 5 | 6 | 1 | 1 | 1 | 0 | 2 | 3 | 3 | 3 | 3 | 7 | 6 | 1 | 7       |  |
|                                |             | 7 | 8 | 9 | 1 | 2 | 0 | 9 | 3 | 4 | 7 | 6 | 4 | 5 | 8 | 9 | 1 | 3 | 8 | 5       |  |
|                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | *TOTALS |  |

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |
| Intestine Large           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |   |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 36 |   |
| Intestine Small           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |   |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |   |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |
| Stomach, Forestomach      | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 49 |   |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Endocrine System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:39  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female  
 F1 100PPM/CTL**

|                            | DAY ON TEST | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>*TOTALS</b> |
|----------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
|                            |             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
|                            | 7           | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7              |
|                            | 4           | 4         | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5              |
|                            | 5           | 5         | 5 | 5 | 5 | 5 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 3              |
|                            | 0           | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0              |
|                            | 0           | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0              |
|                            | 7           | 7         | 7 | 7 | 7 | 9 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 8              |
|                            | 4           | 4         | 4 | 5 | 5 | 6 | 1 | 1 | 1 | 0 | 2 | 3 | 3 | 3 | 3 | 7 | 6 | 1 | 1 | 7              |
|                            | 7           | 8         | 9 | 1 | 2 | 0 | 9 | 3 | 4 | 7 | 6 | 4 | 5 | 8 | 9 | 1 | 3 | 8 | 5 |                |
| Adrenal Medulla            | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Islets, Pancreatic         | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Adenoma                    | X           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| Carcinoma                  |             | X         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| Parathyroid Gland          | +           | +         | + | + | + | + | + | + | + | M | + | + | + | + | + | + | M | + |   | 42             |
| Pituitary Gland            | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Pars Distalis, Adenoma     | X           |           | X | X | X |   | X |   | X | X | X | X | X | X | X | X | X | X | X | 40             |
| Thyroid Gland              | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| C Cell, Adenoma            |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | 1              |
| <b>General Body System</b> |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| NONE                       |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| <b>Genital System</b>      |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Clitoral Gland             | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| Squamous Cell Papilloma    |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| Ovary                      | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| Sarcoma Stromal            |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| Oviduct                    | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| Uterus                     | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| Polyp Stromal              |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2              |
| Vagina                     | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | 48             |
| Granular Cell Tumor Benign | X           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:39  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female  
 F1 100PPM/CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 3 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7 | 7 | 7 | 7 | 7 | 9 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 8 |
|             | 4 | 4 | 4 | 5 | 5 | 6 | 1 | 1 | 1 | 0 | 2 | 3 | 3 | 3 | 3 | 7 | 6 | 1 |
|             | 7 | 8 | 9 | 1 | 2 | 0 | 9 | 3 | 4 | 7 | 6 | 4 | 5 | 8 | 9 | 1 | 3 | 8 |
|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\*TOTALS

#### Hematopoietic System

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node             | + | + | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   | 10 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Spleen                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |

#### Integumentary System

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma         |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 3  |
| Adenoma                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Fibroadenoma           |   |   |   | X |   |   |   | X |   |   |   |   | X |   |   | X | X | 14 |
| Fibroadenoma, Multiple | X | X |   |   | X | X | X |   |   |   | X |   | X |   |   |   |   | 17 |
| Skin                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibroma                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lipoma                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

#### Musculoskeletal System

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone, Femur     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lipoma          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

#### Nervous System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:39  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 100PPM/CTL**

|                              | DAY ON TEST                                 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|                              |   | 7   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ANIMAL ID                    | 4 |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                              | 5 5 5 5 5 5 7 8 8 9 9 9 9 9 9 9 9 9 9 0 0 3 |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Brain Stem            | + | 50  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Cerebellum            | + | 50  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Cerebrum              | + | 50  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Astrocytoma Malignant        | X   | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Respiratory System</b>    |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lung                         | + | 50  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nose                         | + | 50  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trachea                      | + | 50  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Special Senses System</b> |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Eye                          | + | 37  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Harderian Gland              | + | 36  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Urinary System</b>        |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kidney                       | + | 50  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Renal Tubule, Adenoma        |   | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urinary Bladder              | + | 48  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>SYSTEMIC LESIONS</b>      |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Multiple Organ               | + | 50  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

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 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM/CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                |             | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
|                                |             | 7 | 1 | 0 | 1 | 2 | 4 | 8 | 9 | 0 | 0 | 1 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 8 | 9 | 0 | 0 | 2 |
|                                |             | 6 | 8 | 7 | 7 | 0 | 0 | 7 | 5 | 0 | 2 | 4 | 3 | 8 | 8 | 0 | 7 | 1 | 9 | 1 | 3 | 6 | 8 | 5 | 6 | 4 | 5 |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Leiomyosarcoma            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Intestine Large, Rectum   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Small, Ileum    | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + |  |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Hepatocellular Adenoma    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Mesentery                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |  |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |

Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Endocrine System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* ..Total animals with tissue examined microscopically; Total animals with tumor

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 Lab: NCTR

| CD Rat Female<br>F1 500PPM/CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                | ANIMAL ID   | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 |
|                                |             | 7 | 1 | 0 | 1 | 2 | 4 | 8 | 9 | 0 | 0 | 1 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 9 |
|                                |             | 6 | 8 | 7 | 7 | 0 | 0 | 7 | 5 | 0 | 2 | 4 | 3 | 8 | 8 | 0 | 7 | 1 | 9 | 1 | 3 | 6 | 8 |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
|                                |             | 6 | 9 | 2 | 2 | 2 | 3 | 4 | 0 | 0 | 1 | 1 | 2 | 9 | 8 | 8 | 9 | 0 | 1 | 3 | 3 | 4 | 6 |
|                                |             | 8 | 6 | 2 | 9 | 1 | 5 | 0 | 8 | 3 | 5 | 9 | 1 | 8 | 9 | 7 | 8 | 7 | 5 | 3 | 8 | 5 | 9 |
|                                |             | 6 | 2 | 9 | 1 | 5 | 0 | 8 | 3 | 5 | 9 | 1 | 8 | 9 | 7 | 8 | 7 | 5 | 3 | 8 | 5 | 9 | 7 |
| Adenoma                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Adrenal Medulla                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Islets, Pancreatic             |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Parathyroid Gland              |             | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Carcinoma       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thyroid Gland                  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C Cell, Adenoma                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| C Cell, Carcinoma              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Follicular Cel, Adenoma        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>General Body System</b>     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tissue NOS                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Liposarcoma                    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| <b>Genital System</b>          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clitoral Gland                 |             | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ovary                          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Oviduct                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |
| Uterus                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leiomyosarcoma                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Polyp Stromal                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
|                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:40  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM/CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|                                | ANIMAL ID   | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |  |
|                                |             | 7 | 1 | 0 | 1 | 2 | 4 | 8 | 9 | 0 | 0 | 1 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 9 |  |
|                                |             | 6 | 8 | 7 | 7 | 0 | 0 | 7 | 5 | 0 | 2 | 4 | 3 | 8 | 8 | 0 | 7 | 1 | 9 | 1 | 3 | 6 | 8 |  |
| Vagina                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Sarcoma Stromal                |             |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| <b>Hematopoietic System</b>    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Bone Marrow                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Lymph Node                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Lymph Node, Mandibular         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Lymph Node, Mesenteric         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Spleen                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Thymus                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + |  |
| <b>Integumentary System</b>    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Mammary Gland                  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Adenocarcinoma                 |             |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Adenocarcinoma, Multiple       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Adenoma                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Fibroadenoma                   |             | X | X |   |   | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Fibroadenoma, Multiple         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |  |
| Skin                           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Fibroma                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |  |
| Osteosarcoma                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Sarcoma                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| <b>Musculoskeletal System</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:40  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM/CTL | DAY ON TEST | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                |             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                                | 3           | 4         | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |   |
|                                | 7           | 1         | 0 | 1 | 2 | 4 | 8 | 9 | 0 | 0 | 1 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 7 |   |
|                                | 6           | 8         | 7 | 7 | 0 | 0 | 7 | 5 | 0 | 2 | 4 | 3 | 8 | 8 | 0 | 7 | 1 | 9 | 1 | 3 | 6 |   |
|                                | 0           | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                                | 0           | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                                | 0           | 0         | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |   |
|                                | 6           | 9         | 2 | 2 | 2 | 3 | 4 | 0 | 0 | 1 | 1 | 2 | 9 | 8 | 8 | 9 | 0 | 1 | 3 | 3 | 4 |   |
|                                | 8           | 6         | 2 | 9 | 1 | 5 | 0 | 8 | 3 | 5 | 9 | 1 | 8 | 9 | 7 | 8 | 7 | 5 | 3 | 8 | 5 |   |
| Bone, Femur                    | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Bone, Tibia                    |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Nervous System</b>          |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Brain Stem              | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Brain, Cerebellum              | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Brain, Cerebrum                | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| <b>Respiratory System</b>      |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lung                           | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Nose                           | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Squamous Cell Carcinoma        |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |
| Trachea                        | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| <b>Special Senses System</b>   |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eye                            |             | +         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |
| Harderian Gland                |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + | + |
| Lacrimal Gland                 |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + | + |
| <b>Urinary System</b>          |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Kidney                         | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Urinary Bladder                | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + |   |
| <b>SYSTEMIC LESIONS</b>        |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Multiple Organ                 | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:40  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM/CTL | DAY ON TEST | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------|-------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                |             | 7              | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                                |             | 3              | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 |
|                                |             | 8              | 8 | 8 | 9 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 8 | 8 | 8 | 9 | 0 | 0 | 0 |
|                                |             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                      |             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                |             | 5              | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 |
|                                |             | 3              | 5 | 5 | 1 | 4 | 5 | 4 | 6 | 6 | 0 | 0 | 5 | 0 | 1 | 1 | 4 | 6 | 7 | 1 |
|                                |             | 8              | 3 | 4 | 9 | 9 | 5 | 8 | 8 | 9 | 6 | 7 | 0 | 8 | 7 | 8 | 0 | 9 | 6 | 6 |
|                                |             | <b>*TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leiomyosarcoma            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | 1  |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hepatocellular Adenoma    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Mesentery                 |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Endocrine System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:40  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female  
F1 500PPM/CTL**

| DAY ON TEST                | CD Rat Female F1 500PPM/CTL |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>*TOTALS</b> |                |
|----------------------------|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|----------------|
|                            | 0                           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |                |
| ANIMAL ID                  | 7                           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | <b>*TOTALS</b> |                |
|                            | 3                           | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |                |                |
|                            | 8                           | 8 | 8 | 9 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 8 | 8 | 8 | 9 | 0 | 0 | <b>*TOTALS</b> |                |
|                            | 0                           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |                |
|                            | 0                           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | <b>*TOTALS</b> |                |
|                            | 5                           | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |                |                |
|                            | 3                           | 5 | 5 | 1 | 4 | 5 | 4 | 6 | 6 | 0 | 0 | 5 | 0 | 1 | 1 | 4 | 6 | 7 | 1              | <b>*TOTALS</b> |
|                            | 8                           | 3 | 4 | 9 | 9 | 5 | 8 | 8 | 9 | 6 | 7 | 0 | 8 | 7 | 8 | 0 | 9 | 6 | 6              |                |
| Adenoma                    | X                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2              |                |
| Adrenal Medulla            | +                           | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | + | + | +              | 48             |
| Islets, Pancreatic Adenoma | +                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +              | 50             |
| Parathyroid Gland          | M                           | + | M | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | +              | 43             |
| Pituitary Gland            | +                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +              | 50             |
| Pars Distalis, Adenoma     | X                           | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X              | 43             |
| Pars Distalis, Carcinoma   |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                | 1              |
| Thyroid Gland              | +                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +              | 50             |
| C Cell, Adenoma            |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                | 1              |
| C Cell, Carcinoma          |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                | 1              |
| Follicular Cel, Adenoma    |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                | 1              |
| <b>General Body System</b> |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |                |
| Tissue NOS                 |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                | 1              |
| Liposarcoma                |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                | 1              |
| <b>Genital System</b>      |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |                |
| Clitoral Gland             | +                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +              | 49             |
| Ovary                      | +                           | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | +              | 49             |
| Oviduct                    | +                           | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | +              | 47             |
| Uterus                     | +                           | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | +              | 50             |
| Leiomyosarcoma             |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |                | 1              |
| Polyp Stromal              |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                | 3              |
|                            |                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |                |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:40  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F1 500PPM/CTL**

|                               | DAY ON TEST | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>*TOTALS</b> |
|-------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
|                               |             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
|                               | 7           | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7              |
|                               | 3           | 3         | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5              |
|                               | 8           | 8         | 8 | 9 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 8 | 8 | 8 | 9 | 0 | 0 | 0              |
| Vagina                        | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Sarcoma Stromal               |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| <b>Hematopoietic System</b>   |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Bone Marrow                   | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Lymph Node                    | +           |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9              |
| Lymph Node, Mandibular        | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Lymph Node, Mesenteric        | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Spleen                        | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Thymus                        | +           | +         | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | M | + | 47             |
| <b>Integumentary System</b>   |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Mammary Gland                 | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Adenocarcinoma                |             |           |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 7              |
| Adenocarcinoma, Multiple      |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2              |
| Adenoma                       |             |           |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| Fibroadenoma                  | X           | X         | X | X |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   | 18             |
| Fibroadenoma, Multiple        |             |           |   |   |   |   |   |   | X |   |   | X | X | X | X |   |   |   |   | 7              |
| Skin                          | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Fibroma                       |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| Osteosarcoma                  |             |           |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | 1              |
| Sarcoma                       |             |           |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| <b>Musculoskeletal System</b> |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:40  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F1 500PPM/CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | *TOTALS |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
|                                | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
|                                |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
|                                |             | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 |         |
|                                |             | 3 | 5 | 5 | 1 | 4 | 5 | 4 | 6 | 6 | 0 | 0 | 5 | 0 | 1 | 1 | 4 | 6 | 7 | 1       |
|                                |             | 8 | 3 | 4 | 9 | 9 | 5 | 8 | 8 | 9 | 6 | 7 | 0 | 8 | 7 | 8 | 0 | 9 | 6 | 6       |
| Bone, Femur                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Bone, Tibia                    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| <b>Nervous System</b>          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Brain, Brain Stem              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Brain, Cerebellum              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Brain, Cerebrum                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| <b>Respiratory System</b>      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Lung                           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Nose                           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Squamous Cell Carcinoma        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| Trachea                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| <b>Special Senses System</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Eye                            |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 28      |
| Harderian Gland                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 26      |
| Lacrimal Gland                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2       |
| <b>Urinary System</b>          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Kidney                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Urinary Bladder                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49      |
| <b>SYSTEMIC LESIONS</b>        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Multiple Organ                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:40  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 0 PPM | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                           |             | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                           |             | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 |
|                           |             | 6 | 9 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 7 | 8 | 5 | 4 | 4 | 0 |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
|                           |             | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 0 |
|                           |             | 4 | 3 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 4 | 5 |
|                           |             | 0 | 5 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 8 | 7 | 6 | 2 | 4 | 2 |

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | M | + | + | + |
| Intestine Small, Duodenum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum    | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + |
| Intestine Small, Jejunum  | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Fibrous Histiocytoma, Metastatic, Skin

X

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Oral Mucosa          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Sarcoma              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreas             | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

#### Endocrine System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:41  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 0 PPM              | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|  |             | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 2 | 3 | 3 | 5 |
|  |             | 6 | 9 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 7 | 8 | 5 | 4 | 0 |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 9 | 9 | 9 | 9 |
|  |             | 4 | 3 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 3 | 4 | 4 | 5 |
|  |             | 0 | 5 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 8 | 7 | 6 | 2 | 0 |
| Adrenal Medulla                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Pheochromocytoma Benign                |             |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X |
| Islets, Pancreatic                     |             | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Parathyroid Gland                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma                 |             |   |   |   |   |   |   |   |   |   |   |   |   | X | X | X | X | X | X | X | X |
| Thyroid Gland                          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <b>General Body System</b>             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| NONE                                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Genital System</b>                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clitoral Gland                         |             | + | + | + | M | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M |
| Adenoma                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Fibrous Histiocytoma, Metastatic, Skin |             |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |
| Ovary                                  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Tubulostromal Carcinoma                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Oviduct                                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Uterus                                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma                         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Polyp Stromal                          |             |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   | X | X | X | X |
| Vagina                                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue



Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:41  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 0 PPM              | DAY ON TEST | Sarcoma                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|-------------|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |             | 0                       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 4                       | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 8                       | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 6                       | 9 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 7 | 8 | 5 | 4 | 4 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 0                       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 0                       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 1                       | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 4                       | 3 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 4 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 0                       | 5 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 8 | 7 | 6 | 2 | 4 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | Squamous Cell Carcinoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Musculoskeletal System                 |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bone, Femur                            |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bone, Joint                            |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skeletal Muscle                        |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nervous System                         |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Brain Stem                      |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Cerebellum                      |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Granular Cell Tumor Benign             |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Cerebrum                        |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Glioma Malignant, Mixed                |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Respiratory System                     |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lung                                   |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibrous Histiocytoma, Metastatic, Skin |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nose                                   |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Squamous Cell Carcinoma                |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trachea                                |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Special Senses System                  |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Eye                                    |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Harderian Gland                        |             |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

L ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:42  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

| CD Rat Female<br>F3 0 PPM | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   |  |
|                           |             | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |  |
|                           |             | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 | 5 | 5 | 5 |   |  |
|                           |             | 6 | 9 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 7 | 8 | 5 | 4 | 4 | 0 | 1 | 1 | 2 | 2 |   |  |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |   |  |
|                           |             | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 1 |   |  |
|                           |             | 4 | 3 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 1 | 1 | 6 |  |
|                           |             | 0 | 5 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 8 | 7 | 6 | 2 | 4 | 2 | 0 | 1 | 4 | 5 | 4 |  |
| Harderian Gland           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| <b>Urinary System</b>     |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Kidney                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Renal Tubule, Adenoma     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Urinary Bladder           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| <b>SYSTEMIC LESIONS</b>   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Multiple Organ            |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:42  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 0 PPM              | DAY ON TEST | 0       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---------|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |             | 7       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 5       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6 6 6       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 0       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ANIMAL ID                              |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | *TOTALS |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Alimentary System</b>               |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Esophagus                              |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Large, Cecum                 |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Large, Colon                 |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Large, Rectum                |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 42 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Small, Duodenum              |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Small, Ileum                 |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 51 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Small, Jejunum               |             | A + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 51 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liver                                  |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibrous Histiocytoma, Metastatic, Skin |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oral Mucosa                            |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sarcoma                                |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pancreas                               |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Salivary Glands                        |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stomach, Forestomach                   |             | + + + + + M +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stomach, Glandular                     |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Cardiovascular System</b>           |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Blood Vessel                           |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Heart                                  |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Endocrine System</b>                |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adrenal Cortex                         |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:42  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 0 PPM              | DAY ON TEST | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |             | 7   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 5   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 0   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ANIMAL ID                              |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *TOTALS                                |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adrenal Medulla                        |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pheochromocytoma Benign                |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Islets, Pancreatic                     |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adenoma                                |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Parathyroid Gland                      |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pituitary Gland                        |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pars Distalis, Adenoma                 |             | X X X X X X                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 41 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thyroid Gland                          |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>General Body System</b>             |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NONE                                   |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Genital System</b>                  |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clitoral Gland                         |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adenoma                                |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibrous Histiocytoma, Metastatic, Skin |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ovary                                  |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tubulostromal Carcinoma                |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oviduct                                |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Uterus                                 |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adenocarcinoma                         |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Polyp Stromal                          |             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vagina                                 |             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:42  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 0 PPM                      | DAY ON TEST | 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |             | 7 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 5 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6 6 6 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |             | 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ANIMAL ID                                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | *TOTALS |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Hematopoietic System</b>                    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bone Marrow                                    |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node                                     |             |   | + | + |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inguinal, Sarcoma, Metastatic, Skin            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |         | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lumbar, Fibrous Histiocytoma, Metastatic, Skin |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Popliteal, Sarcoma, Metastatic, Skin           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |         | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sarcoma, Metastatic, Skin                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |         | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mandibular                         |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mesenteric                         |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spleen   |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thymus   |             | +   | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sarcoma  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thymoma Malignant                              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |         | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>Integumentary System</b>                    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mammary Gland                                  |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adenocarcinoma                                 |             |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |         | 5  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adenocarcinoma, Multiple                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 2  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibroadenoma                                   |             |   | X |   | X |   | X |   | X |   |   |   |   |   |   |   |   |   | X |   |   | 9       |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibroadenoma, Multiple                         |             |   | X |   | X |   | X |   | X |   | X |   |   |   |   |   |   |   |   | X |   | 23      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skin   |             | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53      |    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibrous Histiocytoma                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:42  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 0 PPM              | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |
|  | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |
| Sarcoma                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | 1  |
| Squamous Cell Carcinoma                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| <b>Musculoskeletal System</b>          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Bone, Femur                            |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Bone, Joint                            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Skeletal Muscle                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| <b>Nervous System</b>                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Brain, Brain Stem                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Brain, Cerebellum                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Granular Cell Tumor Benign             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Brain, Cerebrum                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Glioma Malignant, Mixed                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| <b>Respiratory System</b>              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Lung                                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Fibrous Histiocytoma, Metastatic, Skin |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Nose                                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Squamous Cell Carcinoma                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Trachea                                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| <b>Special Senses System</b>           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Eye                                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Harderian Gland                        |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Date Report Requested:** 10/22/2014

## **Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Time Report Requested:** 14:25:42

**First Dose M/F:** NA / NA

## Lab: NCTR

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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BLANK ..Not examined microscopically

| ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

## P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

### **Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 14:25:42

**First Dose M/F:** NA / NA

Lab: NCTR

## **Cardiovascular System**

## **Endocrine System**

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:43  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 5PPM TO CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                 |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                 | ANIMAL ID   | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                                 |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                 |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                 |             | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 6 | 6 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|                                 |             | 1 | 4 | 7 | 9 | 8 | 8 | 9 | 9 | 4 | 7 | 9 | 3 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 3 | 5 | 5 |
|                                 |             | 5 | 3 | 3 | 3 | 2 | 4 | 7 | 6 | 9 | 5 | 9 | 2 | 1 | 6 | 9 | 8 | 2 | 0 | 3 | 4 | 5 | 6 |
| Adrenal Cortex                  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Adenoma                         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |
| Adrenal Medulla                 |             | M | M | + | M | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Pheochromocytoma Benign         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Islets, Pancreatic              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Adenoma                         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Parathyroid Gland               |             | M | + | + | + | + | + | + | + | M | + | + | + | + | M | + | M | M | M | + | + | + |   |
| Pituitary Gland                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Pars Distalis, Adenoma          |             | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |   |
| Pars Distalis, Carcinoma        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |
| Thyroid Gland                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| C Cell, Adenoma                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| C Cell, Carcinoma               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>General Body System</b>      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| NONE                            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Genital System</b>           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clitoral Gland                  |             | M | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Ovary                           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Oviduct                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Uterus                          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Leiomyoma                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vagina                          |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:43  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 5PPM TO CTL                      | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |  |
|  |             | 4 | 9 | 1 | 2 | 2 | 2 | 3 | 3 | 7 | 9 | 6 | 7 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 4 | 5 | 5 | 5 | 5 |  |
|  |             | 6 | 6 | 7 | 5 | 7 | 8 | 2 | 5 | 5 | 2 | 4 | 7 | 3 | 8 | 2 | 1 | 3 | 4 | 8 | 2 | 1 | 1 | 1 | 1 |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| ANIMAL ID  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |             | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 6 | 6 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |  |
|  |             | 1 | 4 | 7 | 9 | 8 | 8 | 9 | 9 | 4 | 7 | 9 | 3 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 3 | 5 | 5 | 5 | 6 |  |
|  |             | 5 | 3 | 3 | 3 | 2 | 4 | 7 | 6 | 9 | 5 | 9 | 2 | 1 | 6 | 9 | 8 | 2 | 0 | 3 | 0 | 3 | 4 | 5 | 6 |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| <b>Hematopoietic System</b>                          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Bone Marrow  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Lymph Node   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Lymph Node, Mandibular                               |             | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Lymph Node, Mesenteric                               |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Leiomyosarcoma, Metastatic, Intestine Small, Jejunum |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Spleen   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Thymus   |             | + | + | + | + | + | + | + | + | + | + | + | M | M | + | + | + | M | + | + | + | M | + | + | + |  |
| <b>Integumentary System</b>                          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Mammary Gland  |             | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Adenocarcinoma                                       |             |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   | X |   |   |   |   |   |   |   |  |
| Adenocarcinoma, Multiple                             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |  |
| Fibroadenoma   |             |   |   |   |   |   | X |   |   |   |   | X |   | X | X | X |   |   |   |   | X | X |   |   |   |  |
| Fibroadenoma, Multiple                               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X | X | X |  |
| Skin   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| <b>Musculoskeletal System</b>                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Bone, Femur  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| <b>Nervous System</b>                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Brain, Brain Stem                                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Brain, Cerebellum                                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:43  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 5PPM TO CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                 |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                       | 0           | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                                 | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brain, Cerebrum                 | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| <b>Respiratory System</b>       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lung                            | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Nose                            | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Squamous Cell Carcinoma         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Trachea                         | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| <b>Special Senses System</b>    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eye                             | +           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Harderian Gland                 | M           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lacrimal Gland                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Urinary System</b>           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Kidney                          | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Urinary Bladder                 | M           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| <b>SYSTEMIC LESIONS</b>         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Multiple Organ                  | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Leukemia Mononuclear            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:43  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F3 5PPM TO CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 2 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
|             | 1 | 9 | 9 | 1 | 1 | 6 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 9 | 9 | 9 | 1 | 6 |
|             | 7 | 3 | 4 | 5 | 6 | 6 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 0 | 1 | 2 | 4 | 5 |
|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\*TOTALS

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | 48 |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leiomyosarcoma            |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | 1  |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cholangiocarcinoma        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Mesentery                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Stomach, Forestomach      | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Endocrine System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:43  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F3 5PPM TO CTL**

|                          | DAY ON TEST | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | <b>*TOTALS</b> |
|--------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------------|
|                          |             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |                |
|                          | 7           | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7  | 7              |
|                          | 5           | 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5  | 5              |
|                          | 2           | 4         | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5  | 6              |
|                          | 0           | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0              |
|                          | 1           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1              |
|                          | 0           | 0         | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1  | 0              |
|                          | 1           | 9         | 9 | 1 | 1 | 6 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 9 | 9 | 9 | 1 | 6 | 8  |                |
|                          | 7           | 3         | 4 | 5 | 6 | 6 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 0 | 1 | 2 | 4 | 5 | 9  |                |
| Adrenal Cortex           | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Adenoma                  |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2              |
| Adrenal Medulla          | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |                |
| Pheochromocytoma Benign  |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |
| Islets, Pancreatic       | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| Adenoma                  |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2              |
| Parathyroid Gland        | +           | +         | + | + | + | + | + | + | + | M | + | M | + | + | + | + | + | + | 41 |                |
| Pituitary Gland          | +           | +         | + | + | + | + | + | + | + | X | X | X | X | X | X | X | X | X | 50 |                |
| Pars Distalis, Adenoma   | X           | X         | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |
| Pars Distalis, Carcinoma |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                |
| Thyroid Gland            | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |                |
| C Cell, Adenoma          |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |
| C Cell, Carcinoma        |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1              |

### General Body System

NONE

### Genital System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Clitoral Gland | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |   |
| Ovary          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |
| Oviduct        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |   |
| Uterus         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |
| Leiomyoma      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 |
| Vagina         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:44  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 5PPM TO CTL | DAY ON TEST | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---------------------------------|-------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                 |             | 7              | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                                 |             | 5              | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|                                 |             | 2              | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
|                                 |             | 0              | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                       |             | 1              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                                 |             | 0              | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
|                                 |             | 1              | 9 | 9 | 1 | 1 | 6 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 9 | 9 | 1 | 6 |
|                                 |             | 7              | 3 | 4 | 5 | 6 | 6 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 0 | 1 | 2 | 4 |
|                                 |             | <b>*TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

#### Hematopoietic System

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9  |
| Lymph Node, Mandibular                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lymph Node, Mesenteric                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leiomyosarcoma, Metastatic, Intestine Small, Jejunum |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | 1  |
| Spleen   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 45 |

#### Integumentary System

|                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenocarcinoma           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 6  |
| Adenocarcinoma, Multiple |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Fibroadenoma             |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   | 9  |
| Fibroadenoma, Multiple   |   |   |   |   |   |   | X |   | X | X | X | X |   |   |   |   |   | 11 |
| Skin                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Musculoskeletal System

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

#### Nervous System

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:44  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female  
 F3 5PPM TO CTL**

|                              | DAY ON TEST | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>*TOTALS</b> |
|------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
|                              |             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
|                              | 7           | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7              |
|                              | 5           | 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5              |
|                              | 2           | 4         | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6              |
| Brain, Cerebrum              | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| <b>Respiratory System</b>    |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Lung                         | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Nose                         | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Squamous Cell Carcinoma      |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| Trachea                      | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| <b>Special Senses System</b> |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Eye                          | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41             |
| Harderian Gland              | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40             |
| Lacrimal Gland               |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| <b>Urinary System</b>        |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Kidney                       | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Urinary Bladder              | +           | M         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47             |
| <b>SYSTEMIC LESIONS</b>      |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Multiple Organ               | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50             |
| Leukemia Mononuclear         |             |           |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 1              |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
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### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:44  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 100PPM TO CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                   |             | 3 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                                   |             | 7 | 5 | 8 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 8 | 1 | 2 | 2 | 3 | 4 | 5 | 5 |
|                                   |             | 5 | 9 | 8 | 5 | 5 | 6 | 8 | 5 | 1 | 8 | 5 | 4 | 8 | 3 | 6 | 8 | 2 | 0 | 8 | 6 | 4 | 0 | 1 |
|                                   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
|                                   |             | 0 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
|                                   |             | 9 | 2 | 6 | 9 | 9 | 1 | 1 | 5 | 5 | 7 | 1 | 2 | 2 | 4 | 5 | 5 | 3 | 3 | 3 | 4 | 4 | 6 | 1 |
|                                   |             | 5 | 2 | 6 | 2 | 3 | 3 | 4 | 5 | 8 | 3 | 2 | 3 | 6 | 2 | 4 | 6 | 1 | 5 | 7 | 5 | 9 | 4 | 3 |

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum    | + | + | + | + | + | A | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum  | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Hepatocellular Adenoma

|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Mesentery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

|             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Oral Mucosa |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

|          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

|       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

|                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Schwannoma Nos |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

#### Endocrine System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:44  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 100PPM TO CTL | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|-----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|                                   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|                                   | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|                                   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|                                   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|                                   |             | 0 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | 9 |  |
|                                   |             | 9 | 2 | 6 | 9 | 9 | 1 | 1 | 5 | 5 | 7 | 1 | 2 | 2 | 4 | 5 | 5 | 3 | 3 | 3 | 4 | 4 | 6 |  |
|                                   |             | 5 | 2 | 6 | 2 | 3 | 3 | 4 | 5 | 8 | 3 | 2 | 3 | 6 | 2 | 4 | 6 | 1 | 5 | 7 | 5 | 4 | 3 |  |
| Adrenal Cortex                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Adenoma                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Adrenal Medulla                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Islets, Pancreatic                |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Adenoma                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Parathyroid Gland                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Pituitary Gland                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Pars Distalis, Adenoma            |             | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |  |
| Thyroid Gland                     |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| <b>General Body System</b>        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| NONE                              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| <b>Genital System</b>             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Clitoral Gland                    |             | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Adenoma                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Carcinoma                         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Ovary                             |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Oviduct                           |             | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Uterus                            |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Adenocarcinoma                    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |
| Adenoma                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Polyp Stromal                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X |  |
| Sarcoma Stromal                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:44  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 100PPM TO CTL | DAY ON TEST              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                   |                          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                   |                          | 3 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                                   |                          | 7 | 5 | 8 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 8 | 1 | 2 | 2 | 3 | 4 |
|                                   |                          | 5 | 9 | 8 | 5 | 5 | 6 | 8 | 5 | 1 | 8 | 5 | 4 | 8 | 3 | 6 | 8 | 2 | 0 | 8 | 6 | 4 |
| Vagina                            | ANIMAL ID                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                   |                          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                   |                          | 0 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | 9 | 9 |
|                                   |                          | 9 | 2 | 6 | 9 | 9 | 1 | 1 | 5 | 5 | 7 | 1 | 2 | 2 | 4 | 5 | 5 | 3 | 3 | 3 | 4 | 4 |
|                                   |                          | 5 | 2 | 6 | 2 | 3 | 3 | 4 | 5 | 8 | 3 | 2 | 3 | 6 | 2 | 4 | 6 | 1 | 5 | 7 | 5 | 9 |
| Hematopoietic System              | M                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                                   | Bone Marrow              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                                   | Lymph Node               | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                   | Lymph Node, Mandibular   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                                   | Lymph Node, Mesenteric   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Integumentary System              | Spleen                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                                   | Thymus                   | M | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + |
|                                   | Mammary Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                                   | Adenocarcinoma           |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
|                                   | Adenocarcinoma, Multiple |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Musculoskeletal System            | Adenoma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
|                                   | Fibroadenoma             |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   | X | X | X |   | X |   |
|                                   | Fibroadenoma, Multiple   |   |   | X |   |   |   |   | X | X | X |   | X |   |   |   | X | X | X |   | X | X |
|                                   | Skin                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                                   | Bone                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |
| Nervous System                    | Bone, Femur              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                                   | Brain                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                   |                          | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                   |                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                   |                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:45  
 First Dose M/F: NA / NA  
 Lab: NCTR

| <b>CD Rat Female<br/>F3 100PPM TO CTL</b> | DAY ON TEST | 0             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |             | 3 5 5 6             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   | ANIMAL ID   | 7 5 8 0 0 1 1 3 4 4 6 7 7 8 8 8 1 2 2 3 4 5 5 5 5 5             |   |   |   |   |   |   |   |   |   | 5 9 8 5 5 6 8 5 1 8 5 4 8 3 6 8 2 0 8 6 4 0 1 1 1 1 1 |   |   |   |   |   |   |   |   |   |   |
|   |             | 0             | 0             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |             | 0 2 2 2 2 2 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4             | 9 2 6 9 9 1 1 5 5 7 1 2 2 4 5 5 3 3 3 3 4 4 4 4 6 6             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |             | 5 2 6 2 3 3 4 5 8 3 2 3 6 2 4 6 1 5 7 5 9 4 3 8 9 0 1 2 2 3 4 5 | 5 2 6 2 3 3 4 5 8 3 2 3 6 2 4 6 1 5 7 5 9 4 3 8 9 0 1 2 2 3 4 5 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |             | Brain, Brain Stem   | +   | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebellum                         |             | +   | +   | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebrum                           |             | +   | +   | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + |
| <b>Respiratory System</b>                 |             | +   | +   | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + |
| Lung                                      |             | +   | +   | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + |
| Nose                                      |             | +   | +   | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + |
| Trachea                                   |             | +   | +   | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + |
| <b>Special Senses System</b>              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eye                                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Harderian Gland                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Urinary System</b>                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Kidney                                    |             | +   | +   | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + |
| Renal Tubule, Adenoma                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Urinary Bladder                           |             | +   | +   | + | + | M | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + |
| <b>SYSTEMIC LESIONS</b>                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Multiple Organ                            |             | +   | +   | + | + | + | + | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear                      |             | X   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:45  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F3 100PPM TO CTL**

| DAY ON TEST | 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 7 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 5 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 6 6 6 6 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| ANIMAL ID   | 0   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0   | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 4   | 6 | 3 | 3 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 9 |
|             | 0   | 8 | 8 | 9 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 5 | 7 | 7 |

\*TOTALS

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hepatocellular Adenoma    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 1  |
| Mesentery                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Oral Mucosa               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

#### Cardiovascular System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Schwannoma Nos |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

#### Endocrine System

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:45  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F3 100PPM TO CTL**

| DAY ON TEST | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | *TOTALS |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
|             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
| 7           | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7       |
| 5           | 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5       |
| 4           | 4         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6       |
| 0           | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
| 1           | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1       |
| 0           | 1         | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1       |
| 4           | 6         | 3 | 3 | 3 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 9       |
| 0           | 8         | 8 | 9 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 5 | 7 | 7 | 7       |

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Adrenal Cortex         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |
| Adenoma                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1  |
| Adrenal Medulla        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |
| Islets, Pancreatic     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |
| Adenoma                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 2  |
| Parathyroid Gland      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | M  | 47 |
| Pituitary Gland        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X  | 42 |
| Thyroid Gland          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 |

### General Body System

NONE

### Genital System

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Clitoral Gland  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |   |
| Adenoma         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 1  |   |
| Carcinoma       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1 |
| Ovary           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |   |
| Oviduct         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |   |
| Uterus          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |
| Adenocarcinoma  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |   |
| Adenoma         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  | 1 |
| Polyp Stromal   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X | X |    | 5 |
| Sarcoma Stromal |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |    | 2 |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
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### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:45  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F3 100PPM TO CTL**

| DAY ON TEST                   | ANIMAL ID | *TOTALS |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------------------|-----------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
|                               |           | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |
|                               | 0         | 0       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |
|                               | 7         | 7       | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7  |
|                               | 5         | 5       | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5  |
|                               | 4         | 4       | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6  |
| Vagina                        |           | +       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| <b>Hematopoietic System</b>   |           |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Bone Marrow                   |           | +       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node                    |           |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 8  |
| Lymph Node, Mandibular        |           | +       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node, Mesenteric        |           | +       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Spleen                        |           | +       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus                        |           | +       | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| <b>Integumentary System</b>   |           |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Mammary Gland                 |           | +       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma                |           |         | X |   |   |   |   |   |   |   | X | X | X |   |   |   |   |   | 8  |
| Adenocarcinoma, Multiple      |           |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Adenoma                       |           |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Fibroadenoma                  |           | X       |   | X | X |   |   |   |   |   | X | X | X | X | X |   |   |   | 13 |
| Fibroadenoma, Multiple        |           |         | X |   | X |   |   |   |   |   | X | X | X | X | X | X | X | X | 20 |
| Skin                          |           | +       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| <b>Musculoskeletal System</b> |           |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Bone                          |           |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Bone, Femur                   |           | +       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| <b>Nervous System</b>         |           |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Brain                         |           |         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:45  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F3 100PPM TO CTL**

| DAY ON TEST                  | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | *TOTALS |
|------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
|                              | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |         |
| 7                            | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7       |
| 5                            | 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5       |
| 4                            | 4         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6       |
| 0                            | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0       |
| 1                            | 1         | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1       |
| 0                            | 1         | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1       |
| 4                            | 6         | 3 | 3 | 3 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 9       |
| 0                            | 8         | 8 | 9 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 5 | 7 | 7 | 7       |
| Brain, Brain Stem            | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Brain, Cerebellum            | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Brain, Cerebrum              | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| <b>Respiratory System</b>    |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Lung                         | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Nose                         | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Trachea                      | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| <b>Special Senses System</b> |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Eye                          | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40      |
| Harderian Gland              | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40      |
| <b>Urinary System</b>        |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Kidney                       | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Renal Tubule, Adenoma        |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X       |
| Urinary Bladder              | +         | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | 48      |
| <b>SYSTEMIC LESIONS</b>      |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
| Multiple Organ               | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Leukemia Mononuclear         |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

CAS Number: 446-72-0

**First Dose M/F:** NA / NA

**Lab:** NCTR

## Alimentary System

## **Cardiovascular System**

\* ..Total animals with tissue examined microscopically: Total animals with tumor

M ..Missing tissue

+ .. Tissue examined microscopically

#### A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:46  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 500PPM TOCTL | DAY ON TEST | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                  |             | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                  |             | 3           | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
|                                  |             | 2           | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 |
|                                  |             | 4           | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 7 | 8 | 9 | 6 | 9 | 7 | 6 |
|                                  | ANIMAL ID   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                  |             | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                                  |             | 0           | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 6 | 9 | 8 |
|                                  |             | 6           | 4 | 4 | 8 | 8 | 0 | 2 | 6 | 7 | 4 | 7 | 7 | 1 | 1 | 1 | 2 | 5 | 5 | 2 | 6 |
|                                  |             | 7           | 1 | 2 | 1 | 3 | 5 | 3 | 0 | 6 | 0 | 1 | 5 | 1 | 5 | 4 | 6 | 8 | 5 | 2 | 7 |
| Adrenal Medulla                  |             | +           | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + |
| Pheochromocytoma Benign          |             |             |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |
| Islets, Pancreatic               |             | +           | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Adenoma                          |             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Parathyroid Gland                |             | +           | M | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Pituitary Gland                  |             | +           | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma           |             | X           | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Thyroid Gland                    |             | +           | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| C Cell, Adenoma                  |             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |
| <b>General Body System</b>       |             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| NONE                             |             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Genital System</b>            |             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clitoral Gland                   |             | +           | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Ovary                            |             | +           | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Yolk Sac Carcinoma               |             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Oviduct                          |             | +           | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Uterus                           |             | +           | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Polyp Stromal                    |             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Vagina                           |             | +           | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| <b>Hematopoietic System</b>      |             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone Marrow                      |             | +           | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:46  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 500PPM TOCTL        | DAY ON TEST | Systemic Lesions Abridged |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |             | 0                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                               | 3           | 4                         | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
|   | 2           | 9                         | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 0 | 3 | 4 |
|   | 4           | 4                         | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 7 | 8 | 9 | 6 | 9 | 7 | 6 | 7 | 2 | 6 |
|   | 0           | 0                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | 0           | 0                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | 0           | 1                         | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 6 | 9 | 8 | 9 | 9 |
|   | 6           | 4                         | 4 | 8 | 8 | 0 | 2 | 6 | 7 | 4 | 7 | 7 | 1 | 1 | 1 | 1 | 2 | 5 | 5 | 2 | 2 | 6 | 3 |
|   | 7           | 1                         | 2 | 1 | 3 | 5 | 3 | 0 | 6 | 0 | 1 | 5 | 1 | 5 | 4 | 6 | 8 | 5 | 2 | 5 | 7 | 1 | 9 |
|   | 1           | 3                         | 5 | 6 | 0 | 1 | 5 | 1 | 5 | 4 | 6 | 8 | 5 | 2 | 5 | 7 | 1 | 9 | 5 | 1 | 9 | 5 | 6 |
|   | 7           | 8                         | 9 | 7 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Lymph Node                              |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Yolk Sac Carcinoma, Metastatic, |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ovary                                   |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Yolk Sac Carcinoma, Metastatic,  |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ovary                                   |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular                  | +           | +                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + |
| Lymph Node, Mesenteric                  | +           | +                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + |
| Spleen                                  | +           | +                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + |
| Thymus                                  | +           | +                         | + | + | + | + | M | + | + | + | + | + | + | + | + | + | M | M | + | + | + | + | + |
| Thymoma Malignant                       |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Integumentary System</b>             |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mammary Gland                           | +           | +                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma                          | X           |                           |   |   |   |   |   |   |   | X | X | X | X | X | X | X | X |   | X | X |   |   | X |
| Adenocarcinoma, Multiple                |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adenoma                                 |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibroadenoma                            |             |                           |   |   |   |   |   |   |   | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Fibroadenoma, Multiple                  |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   | X |   | X |
| Skin                                    | +           | +                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | + | + | + | + | + |
| Keratoacanthoma                         |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Sarcoma                                 |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Squamous Cell Carcinoma                 |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>Musculoskeletal System</b>           |             |                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:46  
 First Dose M/F: NA / NA  
 Lab: NCTR

| CD Rat Female<br>F3 500PPM TOCTL          | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   | ANIMAL ID   | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 |  |
|   |             | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 0 | 5 |  |
|   |             | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 7 | 8 | 9 | 6 | 9 | 7 | 6 | 7 | 1 |  |
| Bone, Femur                               |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| <b>Nervous System</b>                     |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0 | 0 | 0 | 0 | 0 |  |
| Brain, Brain Stem                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| Brain, Cerebellum                         |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| Brain, Cerebrum                           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| Carcinoma, Metastatic, Pituitary Gland    |             | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Granular Cell Tumor Benign                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |  |
| <b>Respiratory System</b>                 |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| Lung                                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| Squamous Cell Carcinoma, Metastatic, Skin |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |  |
| Nose                                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| Squamous Cell Carcinoma                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |  |
| Trachea                                   |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| <b>Special Senses System</b>              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| Eye                                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | M | + | + | + | + | + |  |
| Harderian Gland                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | M | + | + | + | + | + |  |
| <b>Urinary System</b>                     |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| Kidney                                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| Urinary Bladder                           |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |  |
| <b>SYSTEMIC LESIONS</b>                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

## P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

CAS Number: 446-72-0

**Date Report Requested:** 10/22/2014

**Time Report Requested:** 14:25:46

**First Dose M/F:** NA / NA

## **Lab: NCTR**

CD Rat Female  
F3 500PPM TOCTL

## Multiple Organ

+

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
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### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:46  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female**  
**F3 500PPM TOCTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 |
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
|             | 2 | 2 | 7 | 7 | 7 | 9 | 4 | 4 | 4 | 6 | 9 | 9 | 9 | 0 | 2 | 2 | 6 | 7 |
|             | 8 | 6 | 4 | 2 | 3 | 8 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 |

\*TOTALS

#### Alimentary System

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Large, Cecum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 37 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Ileum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Jejunum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Oral Mucosa               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Sarcoma                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Pancreas                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Salivary Glands           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Forestomach      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Glandular        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

#### Cardiovascular System

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

#### Endocrine System

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma        |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | 1 |    |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-92  
 Test Type: MULTIGEN CHRONIC  
 Route: DOSED FEED  
 Species/Strain: Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/22/2014  
 Time Report Requested: 14:25:46  
 First Dose M/F: NA / NA  
 Lab: NCTR

**CD Rat Female  
 F3 500PPM TOCTL**

| DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|             | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 2 | 2 | 7 | 7 | 7 | 9 | 4 | 4 | 4 | 6 | 9 | 9 | 9 | 0 | 2 | 2 | 6 | 7 | 7 |
|             | 8 | 6 | 4 | 2 | 3 | 8 | 1 | 2 | 3 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 | 1 |   |

\*TOTALS

|                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Medulla         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Pheochromocytoma Benign |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 2  |
| Islets, Pancreatic      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Parathyroid Gland       | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | 46 |
| Pituitary Gland         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pars Distalis, Adenoma  | X |   | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 40 |
| Thyroid Gland           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| C Cell, Adenoma         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 3  |

### General Body System

NONE

### Genital System

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Ovary              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Yolk Sac Carcinoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Oviduct            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Uterus             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Polyp Stromal      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 2  |
| Vagina             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 48 |

### Hematopoietic System

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:47  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female**  
**F3 500PPM TOCTL**

| DAY ON TEST | 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|             | 7 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 5 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 1 2 2 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|             | 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| ANIMAL ID   | 0   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 0   | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 2   | 2 | 7 | 7 | 7 | 9 | 4 | 4 | 4 | 6 | 9 | 9 | 9 | 0 | 2 | 2 | 6 | 7 | 7 |
|             | 8   | 6 | 4 | 2 | 3 | 8 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 | 1 |

\*TOTALS

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lymph Node                              | + | M | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 12 |
| Lumbar, Yolk Sac Carcinoma, Metastatic, |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Ovary                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Renal, Yolk Sac Carcinoma, Metastatic,  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Ovary                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Lymph Node, Mandibular                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lymph Node, Mesenteric                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Spleen                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Thymus                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Thymoma Malignant                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| <b>Integumentary System</b>             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
| Mammary Gland                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma                          |   |   | X | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   | 10 |
| Adenocarcinoma, Multiple                |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   | 2  |
| Adenoma                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Fibroadenoma                            | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   | 19 |
| Fibroadenoma, Multiple                  | X |   | X |   |   |   |   |   |   | X | X | X | X |   |   |   |   |   | 9  |
| Skin                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Keratoacanthoma                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Sarcoma                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Squamous Cell Carcinoma                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| <b>Musculoskeletal System</b>           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** Rat/CD

### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:47  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female**  
**F3 500PPM TOCTL**

|   | DAY ON TEST | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>*TOTALS</b> |
|---|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------|
|   |             | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                |
|   | 7           | 7         | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7              |
|   | 5           | 5         | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5              |
|   | 1           | 2         | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5              |
| Bone, Femur                               | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| <b>Nervous System</b>                     |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Brain, Brain Stem                         | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| Brain, Cerebellum                         | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| Brain, Cerebrum                           | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| Carcinoma, Metastatic, Pituitary Gland    |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| Granular Cell Tumor Benign                |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| <b>Respiratory System</b>                 |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Lung                                      | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| Squamous Cell Carcinoma, Metastatic, Skin |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1              |
| Nose                                      | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| Squamous Cell Carcinoma                   |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X X 3          |
| Trachea                                   | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| <b>Special Senses System</b>              |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Eye                                       | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38             |
| Harderian Gland                           | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38             |
| <b>Urinary System</b>                     |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |
| Kidney                                    | +           | +         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49             |
| Urinary Bladder                           | +           | +         | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47             |
| <b>SYSTEMIC LESIONS</b>                   |             |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                |

\* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

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I ..Insufficient tissue

**Experiment Number:** 99930-92  
**Test Type:** MULTIGEN CHRONIC  
**Route:** DOSED FEED  
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**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Endocrine disruptor (Genistein)

**CAS Number:** 446-72-0

**Date Report Requested:** 10/22/2014  
**Time Report Requested:** 14:25:47  
**First Dose M/F:** NA / NA  
**Lab:** NCTR

**CD Rat Female  
F3 500PPM TOCTL**

| DAY ON TEST    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID      | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
|                | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|                | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 |
| Multiple Organ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
|                | 2 | 2 | 7 | 7 | 7 | 9 | 4 | 4 | 4 | 6 | 9 | 9 | 9 | 0 | 2 | 2 | 6 | 7 | 7 |
|                | 8 | 6 | 4 | 2 | 3 | 8 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 | 1 |

**\*TOTALS**

50

**\*\* END OF REPORT \*\***

\* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically